

PERFORMANCE CONTRACTING AGREEMENT

between

City of Jackson, Mississippi

and

**Siemens Industry, Inc.,
Building Technologies Division**

TABLE OF ARTICLES

1. Agreement
2. Glossary
3. General
4. Performance Guarantee
5. Work by SIEMENS
6. The CLIENT'S Responsibilities
7. Changes and Delays
8. Compensation
9. Acceptance
10. Insurance and Allocation of Risk
11. Hazardous Material Provisions
12. Miscellaneous Provisions
13. Maintenance Services Program
14. Equal Business Opportunity ("EBO")



PERFORMANCE CONTRACTING AGREEMENT

Number: SAP JOB NUMBER

Article 1 AGREEMENT

THIS PERFORMANCE CONTRACTING AGREEMENT ("Agreement") is made this day of , (the "Effective Contract Date", defined below), by and between Siemens Industry, Inc., Building Technologies Division ("SIEMENS") and the party identified below as the CLIENT.

The CLIENT: The City of Jackson, Mississippi
200 South President Street
P.O. Box 17
Jackson, MS 39205-0017

DESIGNATED REPRESENTATIVE: Harvey Johnson, Jr., Mayor
PHONE: 601-960-1084 **FAX:** 601-960-2504

Siemens Industry, Inc., Building Technologies Division
1000 Deerfield Parkway
Buffalo Grove, Illinois 60089

With offices at: 1018 North Flowood Drive
Flowood, MS 39232

DESIGNATED REPRESENTATIVE: Chris McNeil
PHONE: 601-718-1310 **FAX:** 601-718-1340

For Work and Services in connection with the following project (the "Project"):

City of Jackson, MS, Water Infrastructure Improvements

The CLIENT considered performing the following FIMs but at this time, has determined to exclude them from the Scope of Work and Services, Exhibit A:

Savanna Street Waste Treatment Facility; Water Distribution Lines; Sewage Pump and/or Lift Stations; Water Pump and/or Booster Stations; Financial, Planning, and other IT components and modules (including but not limited to Mobile Workforce Management and additional Business Intelligence modules); and Telephone and Data Services

PERFORMANCE CONTRACTING AGREEMENT

Articles and Attachments

This Agreement consists of this document, which includes the following articles and exhibits which are acknowledged by the CLIENT and SIEMENS and incorporated into the Agreement by this reference:

Articles

1. Agreement
2. Glossary
3. General
4. Performance Guarantee
5. Work BY SIEMENS
6. The CLIENT'S Responsibilities
7. Changes and Delays
8. Compensation
9. Acceptance
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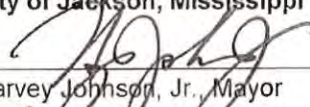
Exhibits

Exhibit A	Scope of Work and Services
Exhibit B	Payment Schedule(s)
Exhibit C	Performance Assurance
Attachment 1	Basins to be Filled at the J.H. Fewell WTP

This Agreement, when executed by an authorized representative of the CLIENT and authorized representatives of SIEMENS, constitutes the entire, complete and exclusive agreement between the Parties relative to the project scope stated in Exhibit A. This Agreement supersedes all prior and contemporaneous negotiations, statements, representations, agreements, letters of intent, awards, or proposals, either written or oral relative to the same, and may be modified only by a written instrument signed by both Parties.

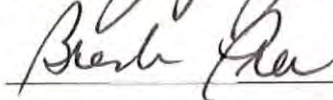
COMPENSATION/TERMS OF PAYMENT:

As full consideration for the performance of the Work and Services set forth in Exhibit A, and for the Performance Assurance set forth in Exhibit C, the CLIENT shall pay SIEMENS in such manner and amounts as agreed to in Exhibit B.

Agreed for **City of Jackson, Mississippi**
(Signature) by: 

Harvey Johnson, Jr., Mayor

City Clerk Attest:

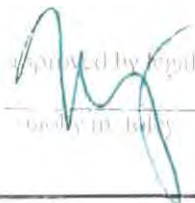


Agreed for **Siemens Industry, Inc.**
(Signature) by: 

Print Name and Title: Matthias Rebellius - President

(Signature) by: 

Print Name and Title: Mark Four - VP - EBO


Approved by Legal
Cody M. Kelly

PERFORMANCE CONTRACTING AGREEMENT

Article 2

Glossary

The following terms shall for all purposes have the meanings stated herein, unless the context otherwise specifies or requires, or unless otherwise defined in the Agreement:

"Acceptance" means the CLIENT has signed, or is deemed to have signed, a Certificate of Substantial Completion.

"Acceptance Date" means the date on which the CLIENT signs or is deemed to have signed a Certificate of Substantial Completion.

"Annual Performance Assurance Report" means the document prepared by SIEMENS and submitted to the CLIENT as part of the Performance Assurance Service Program, which identifies the Savings achieved for the applicable Annual Period.

"Annual Period" means a twelve (12) month period beginning on the Guarantee Date or on any anniversary date thereof.

"Annual Realized Savings" means the actual Savings achieved by the CLIENT during an Annual Period, calculated as the sum of the Measured & Verified Savings plus the Stipulated Savings.

"Applicable Law" means laws, ordinances, codes, rules and regulations applicable to the Work and in effect on the Effective Contract Date.

"Baseline" means the measurements of Facility energy usage taken prior to the Effective Contract Date, and the Facility operating practices in effect prior to the Effective Contract Date, as set forth in the Performance Assurance, Exhibit C.

"Baseline Period" means the period of time from which data is provided to SIEMENS to derive the Baseline measurements. The Baseline Period is set forth in the Performance Assurance, Exhibit C.

"BTU" means a British Thermal Unit and is a unit of thermal energy.

"Capital Off-Set Savings" means a sub-category of Operational Savings where Savings will result in a cost effective upgrade to the Facility to address one or more of the following issues: potential future increased costs, comfort, code non-compliance, usage requirements, user needs and/or expectations.

"Certificate of Substantial Completion" means the document indicating that the Work, or a designated portion of the Work, is Substantially Complete in accordance with the Agreement.

"CLIENT Representative" means the person identified to SIEMENS by the CLIENT as the person authorized to make decisions on behalf of the CLIENT as set forth in Section 6.1(a) hereof.

"Construction Period" means the period between the Effective Contract Date and the first day of the month following the date of Substantial Completion.

"Construction Period Savings" means the actual accumulated Measured & Verified Savings plus the Stipulated Savings achieved from the Effective Contract Date until the Guarantee Date.

"Contracted Baseline" means the post-FIM-implementation Facility operating profile based on parameters described in Exhibit C, which the CLIENT shall maintain throughout the Performance Guarantee Period and are relied upon by SIEMENS for the calculation of Guaranteed Savings as provided in the Performance Assurance, Exhibit C. The Contracted Baseline must also include stipulated hours of operation and plug-loads for all Facilities, and must include stipulated blended, or non-blended, utility rates.

"Deferred Maintenance" means a sub-category of Operational Savings where Savings result from a reduction of current or potential future repair and maintenance costs due to certain work being performed hereunder where such work had been previously postponed.

"Deliverables" shall mean collectively, (a) any Equipment and any Software Product deliverable to CLIENT from SIEMENS under or in connection with the Work, and (b) any Work Product Deliverables.

"Effective Contract Date" is the date appearing at the top of this Agreement, unless specifically indicated otherwise.

"Energy Conservation Measure" or "ECM" means the SIEMENS' Products and/or other third party equipment, devices, materials and/or software as installed by SIEMENS at the Facilities, or as repaired or replaced by SIEMENS or the CLIENT hereunder, for the purpose of improving the efficiency of utility consumption or the accuracy of utility metering.

"Equipment" means the third party product(s) and/or SIEMENS' Product(s) to be provided by or installed by SIEMENS (including but not limited to water meters, light bulbs, chillers, etc.) to meet the design standards for each FIM as described in the Scope of Work and Services, Exhibit A.

"Escalation Rate" means an annual percentage increase to be applied to the previous year's energy savings, operational savings and service pricing, beginning and occurring on dates outlined in the Performance Assurance, Exhibit C. A different

PERFORMANCE CONTRACTING AGREEMENT

Escalation Rate may be applied to differing Savings calculations and/or payment schedules depending on the percentage agreed upon by the Parties.

"Facility" or "Facilities" means the building(s), locations or structure(s) where Work will be installed or implemented.

"Facility Improvement Measures" or "FIMs" means the (i) Instruments, know-how and Intellectual Property, including but not limited to methods and techniques for energy conservation, owned or licensed by SIEMENS and employed by SIEMENS to perform the Work and Services under this Agreement; and, (ii) the installation of Equipment and Software Products with the intent of generating net savings or efficiencies at or in connection with the operation of the Facilities. A FIM may include one or multiple ECMs as well as any non-conservation-related activities, means or methods.

"FEMP" means the Federal Energy Management Program managed by the United States Department of Energy.

"FEMP Guidelines" means the FEMP M&V Guidelines v. 3.0 published by FEMP as *M&V Guidelines; Measurement and Verification for Federal Energy Management Projects*.

"Guarantee Date" means the first day of the month following the date on which the CLIENT executes the final Certificate of Substantial Completion, thus indicating that the Construction Period is complete.

"Guaranteed Annual Savings" are the Guaranteed Measured & Verified Savings plus the Stipulated Savings that SIEMENS guarantees will be achieved in an Annual Period of the Performance Guarantee Period.

"Guaranteed Measured & Verified Savings" means the Measured & Verified Savings that SIEMENS guarantees will be achieved, as described in the Performance Assurance, Exhibit C.

"Guaranteed Savings" means the amount of Savings that SIEMENS guarantees will be achieved at the Facility during the Performance Guarantee Period, as identified in the Performance Assurance, Exhibit C as subject to the limitation identified in Section 4.8.

"Hazardous Materials" refers to the definition found in Section 11.1.

"Instruments" means all know-how, tools and related documentation owned or licensed by SIEMENS and used by SIEMENS to install or commission Equipment and Software Products for operation at the Facility, including but not limited to tools for installing any Software Products in Equipment, performing diagnostics on Equipment as installed in the Facility as well as any reports, notes, calculations, data, drawings, estimates, specifications, manuals, documents, all computer programs, codes and computerized materials prepared by or for SIEMENS and used by SIEMENS to provide an ECM or a FIM. Instruments excludes Work Product Deliverables.

"Intellectual Property Rights" or "Intellectual Property" means all trade secrets, patents and patent applications, trade marks (whether registered or unregistered and including any goodwill acquired in such trade marks), services marks, trade names, internet domain names, copyrights (including rights in computer software), moral rights, database rights, design rights, rights in know-how, rights in inventions (whether patentable or not) including, but not limited to, any and all renewals or extensions thereof, and all other proprietary rights (whether registered or unregistered, and any application for the foregoing), and all other equivalent or similar rights which may subsist anywhere in the world, including, but not limited to, any and all renewals or extensions thereof.

"IPMVP" means the International Performance Measurement and Verification Protocol, Volume 1, EVO 10000-1.2007 as prepared by the Efficiency Valuation Organization.

"kW" and "kWh" means kilowatt and kilowatt hour, respectively.

"Maintenance Services Program" or "MSP" means the Services performed by SIEMENS to maintain the Equipment in good working order. The MSP may also contain Services unrelated to the maintenance of the Equipment. If applicable, the MSP is more fully described in the Scope of Work and Services, Exhibit A.

"Material Change" means a measurable deviation in the Contracted Baseline such that there is an adverse impact on the Annual Realized Savings which results in a Savings Shortfall or will result in Savings Shortfall that cannot be remedied by CLIENT'S return of operations to the Contracted Baseline.

"Measured & Verified Savings" means those Savings that can be calculated and ascertained by the methodology set forth in the Performance Assurance, Exhibit C.

"Oil" refers to the definition found in Section 11.1.

"Operational Savings" means Savings derived from reduced operational expenses, including but not limited to, Deferred Maintenance, or Capital Off-Set Savings. Operational Savings can only be expressed in monetary value and are Stipulated Savings.

"Parties" means the CLIENT and SIEMENS.

PERFORMANCE CONTRACTING AGREEMENT

"Performance Assurance" is the process of ascertaining whether the FIMs are performing at the level necessary to achieve the Guaranteed Savings.

"Performance Assurance Services Program" or "PASP" means the Services required to monitor the operation of the FIMs so that SIEMENS can provide the Annual Performance Assurance Report detailing the Annual Realized Savings and comparing the same to the Annual Guaranteed Savings based upon the calculations agreed to by the Parties in the Performance Assurance, Exhibit C. The Services provided under the PASP are described in the Scope of Work and Services, Exhibit A.

"Performance Guarantee" means the guarantee that SIEMENS makes to the CLIENT which is reconciled and confirmed through the Performance Assurance process set forth in the Performance Assurance, Exhibit C.

"Performance Guarantee Period" means the timeframe from the Guarantee Date to the last day of the final Annual Period as described in Table 1.1 of the Performance Assurance, Exhibit C, or the period from the Guarantee Date until the termination of this Agreement, whichever occurs earlier.

"Permitted Users" means the CLIENT, its employees and agents.

"Savings" means the Parties' intended result from implementing all FIMs. Savings can be derived from reductions in energy or utility consumption, reductions in operating expenses, a changed utility rate classification, increases in billable utility consumption, or a combination thereof. The Savings that are achieved from reduced energy or utility consumption are converted to a dollar figure based upon the calculation in Article 4.1.1 and as detailed in the Performance Assurance, Exhibit C. When converted to a dollar figure, these Savings become energy cost savings. Operational Savings are only expressed in a dollar figure.

"Savings Shortfall" means the Annual Realized Savings less the Guaranteed Annual Savings for the Annual Period resulting in an amount less than zero.

"Services" means those services to be provided by SIEMENS as described in the Scope of Work and Services, Exhibit A.

"SIEMENS Pre-existing Intellectual Property" means any Intellectual Property: (i) that has been conceived or developed by an employee or subcontractor of SIEMENS before SIEMENS performs any Work or Services under this Agreement; (ii) that is conceived or developed by such employee or subcontractor at any time wholly independently of SIEMENS performing the Work under this Agreement; or, (iii) if developed while performing the Work under this Agreement, where the development of Intellectual Property for the benefit of the CLIENT is not expressly identified as a FIM or part of a FIM. SIEMENS Pre-existing Property is included in all reports, notes, calculations, data, drawings, estimates, specifications, manuals, documents, all computer programs, codes and computerized materials prepared by or for SIEMENS.

"SIEMENS Product" means a product, including Software Product and/or Equipment, offered for sale or license by SIEMENS or its affiliates or subsidiaries and developed prior to performing the Work or SIEMENS rendering services in connection with this Agreement. A SIEMENS Product also includes improvements or modifications to any Equipment and any Software Product developed by SIEMENS or developed as part of the Work, including any SIEMENS Product that is configured or modified for operation at a site specified by the CLIENT. Any information that is provided by the CLIENT and incorporated into a SIEMENS Product is not, by itself, a SIEMENS Product. A compilation of such information and the product of such compilation, however, is a SIEMENS Product.

"Software Product" means any software that is owned or licensed by SIEMENS or its affiliates and that is either separately deliverable for use in the Equipment or for use in a computer system owned by the CLIENT or delivered as firmware embedded in the Equipment.

"Stipulated Savings" are a sub-category of Guaranteed Savings that do not require post-FIM implementation measurement and verification because they are agreed upon by the Parties based upon representations made to SIEMENS by the CLIENT and through the application of generally accepted analytical formulae. As such, Stipulated Savings are agreed upon in advance by the Parties and cannot be changed. When used as a methodology for representing a FIM's energy savings, such methodology is not recognized as a measurement and verification methodology under IPMVP. Therefore, where the IPMVP measurement methodologies are required, a methodology other than Stipulated Savings must be used to calculate energy savings.

"Substantial Completion" or "Substantially Complete" means the Work, or any identifiable portion thereof, is sufficiently complete, in accordance with the provisions of this Agreement relating to the Scope of the Work and Services, Exhibit A, such that the CLIENT will be able to realize from such Work substantially all of the practical benefits intended to be gained therefrom, or otherwise employ the Work or the FIMs for their intended purposes. To the extent that the Work requires multiple Acceptances, the Work's final Substantial Completion date shall determine the Guarantee Date. The determination that the work is Substantially Complete shall not affect the warranties for the Work and Services provided

PERFORMANCE CONTRACTING AGREEMENT

under this Agreement and does not absolve SIEMENS of any liability it may have for any latent, hidden or otherwise undetectable defects that may exist in the Work and Services at the time of the determination of Substantial Completion.

"Therm" is a measure of energy equal to 100,000 BTUs.

"Total Guaranteed Savings" means the sum of the Savings that are guaranteed for all Annual Periods during the Performance Guarantee Period (inclusive of the Construction Period, if applicable). The Total Guaranteed Savings are reflected in Tables 1.1 and 1.2 in the Performance Assurance, Exhibit C.

"Work" means collective labor, Equipment and services comprising the FIMs to be performed by SIEMENS, as described in the Scope of Work and Services, Exhibit A.

"Work Product Deliverable" means the tangible form of a report or drawing specifically prepared for, commissioned by and deliverable to the CLIENT in connection with the Work to be performed by SIEMENS under this Agreement.

Article 3

General

3.1 The Parties hereto acknowledge and agree that this Agreement has been negotiated at arm's length. Each party has conferred, or has had the opportunity to confer, with their respective legal counsel. Accordingly, in the event any claim is made relating to any conflict, omission, or ambiguity in this Agreement, no presumption, burden of proof, or persuasion shall be implied by virtue of the fact that this Agreement was drafted by or at the request of a particular party or its legal counsel.

3.2 The CLIENT hereby engages and SIEMENS hereby accepts the engagement to perform and to provide the Work and Services set forth in Exhibit A in accordance with the terms and conditions of this Agreement.

3.3 SIEMENS shall perform the Work as an independent contractor with exclusive control of the manner and means of performing the Work in accordance with the requirements of this Agreement. SIEMENS has no authority to act or make any agreements or representations on behalf of the CLIENT. This Agreement is not intended, and shall not be construed to create, between the CLIENT and SIEMENS, the relationship of principal and agent, joint-venturers, co-partners or any other such relationship, the existence of which is hereby expressly denied. No employee or agent of SIEMENS shall be, or shall be deemed to be, an employee or agent of the CLIENT.

3.4 SIEMENS represents, warrants and covenants to the CLIENT that:

- (a) It has all requisite corporate power to enter into this Agreement, and that its execution hereof has been duly authorized and does not and will not constitute a breach or violation of any of SIEMENS'S organizational documents, any Applicable Law, or any agreements with third parties;
- (b) It has done and will continue to do all things necessary to preserve and keep in full force and effect its existence and the Agreement;
- (c) This Agreement is the legal, valid and binding obligation of SIEMENS, in accordance with its terms, and all requirements have been met and procedures have been followed by SIEMENS to ensure the enforceability of the Agreement;
- (d) To SIEMENS'S best knowledge, there is no pending or threatened, suit, action, litigation or proceeding against or affecting SIEMENS that affects the validity or enforceability of this Agreement; and,
- (e) It is duly authorized to do business in all locations where the Work and Services are to be performed.

3.5 The CLIENT represents, warrants and covenants to SIEMENS that:

- (a) It has all requisite corporate power and/or statutory authority to enter into this Agreement, and that its execution hereof has been duly authorized and does not and will not constitute a breach or violation of any of the CLIENT'S organizational documents, any Applicable Law, or any agreements with third parties;
- (b) It has done and will continue to do all things necessary to preserve and keep in full force and effect its existence and the Agreement;
- (c) This Agreement is the legal, valid and binding obligation of the CLIENT, in accordance with its terms, and all requirements have been met and procedures have been followed by the CLIENT to ensure the enforceability of the Agreement;
- (d) To the CLIENT'S best knowledge, there is no pending or threatened, suit, action, litigation or proceeding against or affecting the CLIENT that affects the validity or enforceability of this Agreement; and,
- (e) The CLIENT has consulted with its legal counsel and is relying on the advice of its counsel concerning all legal issues related to this Agreement, and is not relying on SIEMENS in this regard.

PERFORMANCE CONTRACTING AGREEMENT

Article 4

Performance Guarantee

4.1 The Annual Realized Savings generated during each Annual Period will be no less than the Guaranteed Annual Savings as shown in Tables 1.1 and 1.2 of the Performance Assurance, Exhibit C, subject to the limits in Section 4.8. The measurement and verification calculation methodology for determining the Savings is set forth in the Performance Assurance, Exhibit C.

4.1.1 **General.** Except as otherwise provided, Savings will be calculated as follows:

- (a) Energy savings will be calculated for each month of each Annual Period as the product of (a) "units of energy saved" (kWh, Therms, Ccf, etc.) multiplied by (b) "cost of utility."
 - 1) In applicable cases, units of energy saved are calculated by 1) assuming the Contracted Baseline has been maintained per Section 4.3 below, and 2) subtracting the applicable Annual Period's measured units of energy consumed from the Baseline units of energy defined in Article 5 of Exhibit C.
 - 2) Costs of energy are defined in Article 6 of Exhibit C-Utility Rate Structures and Escalation Rates.
- (b) For projects with a water meter FIM, Savings will use the following calculations:
 - 1) Predicted Existing Consumption (Units) = Existing Consumption at 100% Accuracy (as shown in Table 5.1) x Predicted Meter Accuracy from Test Data applied per Guarantee Year (%) (as shown in Table 5.7);
 - 2) Consumption Billed with New Meters (Units) = Existing Consumption at 100% Accuracy x Actual New Meter Accuracy (%), where New Meter Accuracy is based on the measured and verified meter accuracy per Guarantee Year (%);
 - 3) Annual Consumption Increase (Units) = Consumption Billed with New Meters (Units) - Predicted Existing Consumption (Units); and
 - 4) Annual Consumption Increase (\$) = Annual Consumption Increase (Units) x Water Rate (\$/Unit).

4.2 Any future Escalation Rates to be applied to utility, energy or other costs are set forth in Exhibit C. SIEMENS and the CLIENT agree that the Baseline data set forth in Exhibit C is a full and accurate reflection of the existing Facility, equipment, operation, business use and energy usage, and that such Baseline data will be the basis on which all future energy use will be compared in order to determine the Annual Realized Savings.

4.3 SIEMENS and the CLIENT agree that the Contracted Baseline fully described in Article 7 of Exhibit C will represent the new operating and/or equipment profile of the Facilities resulting from the FIM implementation. The Performance Guarantee is dependent upon and is subject to the express condition that the CLIENT operates and maintains its Facilities within the Contracted Baseline parameters, as may be adjusted in accordance with the terms herein, during the entire term of the Performance Guarantee Period.

4.4 The CLIENT agrees to notify SIEMENS prior to or within thirty (30) days of CLIENT'S knowledge of any Material Change.

4.5 Within thirty (30) days of notice of a Material Change, SIEMENS'S discovery of a Material Change and with prompt notice to CLIENT, SIEMENS will either:

- (a) Negotiate with CLIENT an adjustment to the Performance Assurance and the Performance Guarantee as a result of the Material Change; or,
- (b) Where a commercially reasonable adjustment to the Performance Guarantee is unavailable or cannot be agreed upon between SIEMENS and CLIENT, terminate both the Performance Assurance and the Performance Guarantee.

4.6 A Performance Guarantee Period savings reconciliation as identified in Section 4.1 will be performed at the end of each Annual Period as follows:

- (a) Within ninety (90) days of the Guarantee Date, the Construction Period Savings shall be reconciled and applied to the calculation of the first Annual Period's Annual Realized Savings.
- (b) At the conclusion of each Annual Period, SIEMENS will calculate the Annual Realized Savings and compare the calculated amount to the applicable Guaranteed Annual Savings amount.
- (c) Where the Annual Realized Savings are less than the Guaranteed Annual Savings, a Savings Shortfall shall be recorded for the applicable Annual Period.
- (d) A Savings Shortfall shall be paid by SIEMENS within sixty (60) days following the CLIENT'S acceptance of the reconciliation and once paid SIEMENS shall have fulfilled its obligations under the Performance Guarantee for the applicable Annual Period.

PERFORMANCE CONTRACTING AGREEMENT

4.6.1 As the mutual goal of the Parties is to maximize Savings, if SIEMENS can correct a Savings Shortfall through an operational improvement which: 1) does not adversely affect the CLIENT, users or the Equipment, 2) is at no expense or material inconvenience to the CLIENT, and 3) is without future operational expense, and the CLIENT declines to allow such operational improvement, then any future Savings Shortfall that the improvement would have corrected will be negated by deeming the value of the Savings Shortfall as Savings achieved and adding the amount of same to the Annual Realized Savings calculations for each Annual Period thereafter.

4.7 The Performance Guarantee is dependent upon and is subject to the express condition that the CLIENT maintains the PASP during the entire Performance Guarantee Period. If the CLIENT cancels or terminates the PASP then: (a) The Performance Guarantee shall terminate immediately and be void and of no force or effect; or, (b) Where termination of the Performance Guarantee acts to render the Agreement in violation of Applicable Law, all Guaranteed Savings thereafter shall be determined to have been achieved and SIEMENS shall have been deemed to have met its Performance Guarantee obligations under this Agreement for each and every Annual Period thereafter without the obligation to provide the CLIENT, or any third-party as the case may be, with any further Annual Performance Assurance Reports. Notwithstanding the above, if CLIENT fails to make timely payment for the PASP Services or impedes SIEMENS ability to perform the PASP Services, then SIEMENS obligation to 1) provide the Annual Performance Assurance Report, and 2) make a Savings Shortfall payment (if any is due), shall be suspended until CLIENT'S delay is remedied and SIEMENS has an equitable opportunity to complete its obligations.

4.8 The payments and credits based on Savings Shortfalls, if any, are the sole remedy of the CLIENT under this Performance Guarantee. ANY PAYMENTS MADE OR TO BE MADE TO THE CLIENT UNDER THE TERMS OF THIS PERFORMANCE GUARANTEE SHALL NOT EXCEED THE PAYMENTS ACTUALLY MADE BY CLIENT TO EITHER SIEMENS AND/OR A THIRD-PARTY (IN THE EVENT THAT THE CLIENT HAS FINANCED THE TRANSACTION) FOR THE AGGREGATE OF: THE PRICE, AS DEFINED IN EXHIBIT B, ARTICLE 1.1; THE PASP PAYMENTS; THE MSP PAYMENTS, IF ANY; AND, IF APPLICABLE, THE CLIENT'S COST OF FINANCING THE WORK. The CLIENT'S cost of financing the Work is the cost of financing calculated either: (a) On the date that the escrow account is funded in accordance with Exhibit B, Article 1.2; or, (b) On the Effective Contract Date if the escrow requirement is expressly waived by SIEMENS.

1.9 The CLIENT represents that all existing equipment that is not installed by SIEMENS under this Agreement but is deemed necessary to achieve the Performance Guarantee, is in satisfactory working condition. At least 60 days prior to the beginning of the Performance Guarantee Period, SIEMENS will have inspected all such existing equipment and reported any deficiencies to the CLIENT. To the extent that the deficiencies are not remedied by the CLIENT prior to the Guarantee Date, the adverse affect on the ability of the Project to attain the necessary Guaranteed Savings shall be factored into the Annual Performance Assurance Report and, if necessary, the Performance Guarantee shall be adjusted accordingly.

4.10 If the Equipment or the existing equipment is replaced, altered or moved by any person (including the CLIENT) other than SIEMENS or a person authorized by SIEMENS, the CLIENT shall immediately notify SIEMENS in writing, and SIEMENS reserves the right to perform a reacceptance test on, or if necessary a re-commissioning of, the system at the CLIENT'S expense in order to determine if a Material Change has occurred.

4.11 SIEMENS will have no liability or obligation to continue providing PASP Services or any Guaranteed Savings under the Performance Guarantee in the event that the CLIENT fails to:

- (a) Authorize a re-acceptance test or re-commissioning that SIEMENS reasonably deems necessary in order to determine if a Material Change has occurred, but the termination of SIEMENS liability or obligation shall only apply to the equipment for which the CLIENT fails to authorize a re-acceptance test or re-commissioning;
- (b) Provide access to any Facility where Work is to be performed, including water meter installation locations, within a reasonable time of receiving notice of SIEMENS' need to access the Facility;
- (c) Service and maintain all Equipment in accordance with the manufacturers' recommendations which causes a Savings Shortfall that cannot be corrected through resumption of proper Equipment service and maintenance; or,
- (d) Provide SIEMENS with accurate Facility operating information within a reasonable time after such information becomes reasonably available to the CLIENT, including energy usage and cost, executed preventive maintenance and repair records, building or equipment additions, affected water meter accounts by size and their respective historical consumption, and occupancy levels during each Annual Period.

4.12 Should the CLIENT decide to discontinue the PASP before the end of the Performance Guarantee Period, the CLIENT will give SIEMENS thirty (30) days prior written notice, and the CLIENT will pay to SIEMENS its actual up-front costs and expenses in preparing to perform the PASP as contracted for the Annual Period.

PERFORMANCE CONTRACTING AGREEMENT

4.13 Unless expressly contrary to Applicable Law, any disputes concerning the calculation of the Annual Realized Savings or changes to the Contracted Baseline that are not resolved by negotiation between the Parties within thirty (30) days of the notice of the dispute, will be submitted to a third-party professional engineering firm which is reasonably acceptable to both SIEMENS and the CLIENT. In resolving any such dispute, the third-party professional engineering firm's decision shall be non-binding and shall allocate liability for payment of its fee between the Parties, after taking into consideration the merits of each party's position.

Article 5

Work by SIEMENS

5.1 SIEMENS will perform the Work expressly described in this Agreement and in any work release documents or change orders that are issued under this Agreement and signed by both Parties. The Work performed by SIEMENS shall be conducted in a workmanlike manner.

5.2 SIEMENS shall perform the Work during its normal hours, Monday through Friday inclusive, excluding holidays, unless otherwise agreed herein. The CLIENT shall make the Facility available so Work may proceed in an efficient manner.

5.3 SIEMENS is not required to conduct safety, reacceptance or other tests, install new devices or equipment or make modifications to any Equipment unless expressly made a part of the Work identified in the Scope of Work and Services, Exhibit A. Any CLIENT request to change the scope or the nature of the Work or Services must be in the form of a mutually agreed change order, effective only when executed by the Parties and formally approved by the CLIENT's governing authorities.

5.4 All Work Product Deliverables shall become the CLIENT'S property upon receipt by CLIENT. SIEMENS may retain file copies of such Work Product Deliverables. If any Instruments are provided to the CLIENT under this Agreement, any such Instruments shall remain SIEMENS property, including the Intellectual Property conceived or developed by SIEMENS in the Instruments. All SIEMENS Pre-existing Intellectual Property that may be included in the Deliverables provided to the CLIENT under this Agreement shall also remain SIEMENS'S property including the SIEMENS Pre-existing Intellectual Property included in the Work Product Deliverables. All Work Product Deliverables and any Instruments provided to the CLIENT are for Permitted Users' use and only for the purposes disclosed to SIEMENS. SIEMENS hereby grants the CLIENT a royalty-free (once payments due under this Agreement are paid to SIEMENS), non-transferable, perpetual, nonexclusive license to use any SIEMENS Pre-existing Intellectual Property solely as incorporated into the Deliverables and SIEMENS' Intellectual Property as incorporated into any Instruments provided to the CLIENT under this Agreement. Under such license, and following agreement to be bound to such separate confidentiality provisions that may exist between the Parties, Permitted Users shall have a right to:

- (a) Use, in object code form only, the Software Products included in the Deliverables ("Software Deliverables");
- (b) Make and retain archival and emergency copies of such Software Deliverables (subject to any confidentiality provisions) except if the Software Deliverable is embedded in the Equipment; and,
- (c) Use all such Deliverables and such Instruments, provided however, the Deliverables and Instruments shall not be used or relied upon by any parties other than Permitted Users, and such use shall be limited to the particular project and location for which the Deliverables are provided. All Deliverables provided to the CLIENT are for Permitted Users' use only for the purposes disclosed to SIEMENS, and the CLIENT shall not transfer them to others or use them or permit them to be used for any extension of the Work or any other project or purpose, without SIEMENS'S express written consent.

5.4.1 Any reuse of such Deliverables or such Instruments for other projects or locations without the written consent of SIEMENS, or use by any party other than Permitted Users will be at Permitted Users' risk and without liability to SIEMENS; and in the event of any such unauthorized use, the CLIENT shall assume responsibility for any claims, losses or damages arising from CLIENT's unauthorized use of such Deliverables.

5.4.2 In consideration of such license, CLIENT agrees not to reverse engineer any Equipment or Software Product to reconstruct or discover any source code, object code, firmware, underlying ideas, or algorithms of such Equipment or Software Product even to the extent such restriction is allowable under Applicable Law.

5.4.3 Nothing contained in this Agreement shall be interpreted or construed to convey to the CLIENT the pre-existing Intellectual Property rights of any third party incorporated into the Deliverables. CLIENT agrees to take delivery of any Software Deliverables subject to any applicable SIEMENS or third party end-user license agreement accompanying such Software Deliverable.

PERFORMANCE CONTRACTING AGREEMENT

5.5 SIEMENS shall be responsible for any portion of the Work performed by any subcontractor of SIEMENS. SIEMENS shall not have any responsibility, duty or authority to direct, supervise or oversee any contractor of the CLIENT or their work or to provide the means, methods or sequence of their work or to stop their work. SIEMENS'S Work and/or presence at the Facility shall not relieve others of their responsibility to the CLIENT or to others.

5.6 SIEMENS warrants that:

(a) Unless otherwise agreed, all Equipment shall be new and of good quality. Until one year from the date the Equipment is installed, all Equipment manufactured by SIEMENS or bearing its nameplate will be free from defects in material and workmanship arising from normal use and service.

(b) Labor for all Work, excluding PASP or MSP Services, is warranted to be free from defects in workmanship for one year after the Work is performed. PASP Services and MSP Services are warranted to be free from defects in workmanship for ninety (90) days after the Services are performed.

5.7 Warranty Limitation:

(a) The limited warranties set forth in Section 5.6 will be void as to, and shall not apply to; any Equipment (i) repaired, altered or improperly installed by any person other than SIEMENS or its authorized representative; (ii) which the CLIENT or a third party subjects to unreasonable or improper use or storage, uses beyond rated conditions, operates other than per SIEMENS'S or the manufacturer's instructions, or otherwise subjects to improper maintenance, negligence or accident; (iii) damaged because of any use of the Equipment after the CLIENT has, or should have had, knowledge of any defect in the Equipment; or (iv) not manufactured, fabricated and assembled by SIEMENS or not bearing SIEMENS'S nameplate. However, SIEMENS assigns to the CLIENT, without recourse, any and all assignable warranties available from any manufacturer, supplier, or subcontractor of such Equipment, and where any warranty is non-assignable, SIEMENS warrants under the same terms as contained in 5.6.

(b) Any claim under the limited warranty granted above must be made in writing to SIEMENS within sixty (60) days after discovery of the claimed defect unless discovered directly by SIEMENS. Such limited warranty only extends to the CLIENT and not to any subsequent owner of the Equipment. The CLIENT'S remedy for any Equipment or Services not conforming with this limited warranty is, at CLIENT'S option: (i) repair or replacement of defective components of covered Equipment; (ii) re-performance of the defective portion of the Services; or (iii) to the extent previously paid and itemized, the issuance of a credit or refund for the original purchase price of such defective component or portion of the Equipment or Services.

(c) SIEMENS shall not be required to repair or replace more than the component(s) of the Equipment or the portion of the Work and Services actually found to be defective. Repaired Equipment or Services will be warranted hereunder only for the remaining portion of the original warranty period or 120 days, whichever is greater.

5.8 THE EXPRESS LIMITED WARRANTIES PROVIDED ABOVE ARE IN LIEU OF AND EXCLUDE ALL OTHER WARRANTIES, STATUTORY, EXPRESS, OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY EXPRESSLY DISCLAIMED. THE LIMITED EXPRESS WARRANTIES AND REPRESENTATIONS SET FORTH IN THIS AGREEMENT MAY ONLY BE MODIFIED OR SUPPLEMENTED IN A WRITING EXECUTED BY A DULY AUTHORIZED SIGNATORY OF EACH PARTY.

5.9 SIEMENS will not be responsible for the maintenance, repair or replacement of, or Services necessitated by reason of:

(a) Non-maintainable, non-replaceable or obsolete parts of the Equipment, including but not limited to: ductwork, shell and tubes, heat exchangers, coils, unit cabinets, casings, refractory material, electrical wiring, water and pneumatic piping, structural supports, cooling tower fill, slats and basins, etc., unless covered by the warranty provisions herein or otherwise specifically stated herein; or

(b) The CLIENT'S or a third-party's negligence, abuse, misuse, improper or inadequate repairs or modifications, improper operation, lack of operator maintenance or skill, corrosion, erosion, improper or inadequate water treatment, electrolytic action, chemical action; failure to comply with manufacturer's operating and environmental requirements, Acts of God, or other reasons beyond SIEMENS'S control. Unless expressly agreed in writing, SIEMENS is not responsible for the removal or reinstallation of replacement valves, dampers, or waterflow and tamper switches with respect to pipes and ductwork, including vent or drain system. SIEMENS ASSUMES NO RESPONSIBILITY FOR ANY SERVICE PERFORMED ON ANY EQUIPMENT OTHER THAN THAT PERFORMED BY SIEMENS OR ITS AGENTS.

PERFORMANCE CONTRACTING AGREEMENT

Article 6

The CLIENT'S Responsibilities

6.1 The CLIENT, without cost to SIEMENS, shall:

- (a) Designate a contact person with authority to make decisions for the CLIENT regarding the Work and provide SIEMENS with information sufficient to contact such person in an emergency;
 - (b) Coordinate the work of contractors under CLIENT'S sole control so as not to disrupt the Work and Services proceeding in an efficient manner;
 - (c) Provide or arrange for 24 hour, 7 day per week access and make all reasonable provisions for SIEMENS to enter any Facility where Work is to be performed so that Work may proceed in an efficient manner;
 - (d) Permit SIEMENS to control and/or operate all building controls, systems, apparatus, equipment and machinery necessary to perform the Work;
 - (e) Furnish SIEMENS with blueprints, surveys, legal descriptions, waste management plans and all other available information pertinent to the Work and any Facility where the Work is to be performed as may be reasonably requested by SIEMENS. Such plans and blueprints, along with an executed copy of this Agreement, with its Exhibits, shall be kept and maintained in CLIENT'S files for the duration of this Agreement;
 - (f) Furnish SIEMENS with all approvals, permits and consents from government authorities and others as may be required for performance of the Work, except for those SIEMENS has expressly agreed in writing to obtain;
 - (g) In accordance with Article 11 hereof, promptly notify SIEMENS of all known or suspected Hazardous Materials at the Facility, of any contamination of the Facility by Oil or Hazardous Material, and of any other conditions requiring special care or which may reasonably be expected to affect the Work, and provide SIEMENS with any available documents describing the quantity, nature, location and extent of such materials, contamination or conditions;
 - (h) Comply with Applicable Law and provide any notices required to be given to any government authorities in connection with the Work, except such notices SIEMENS has expressly agreed in writing to give;
 - (i) Provide SIEMENS with legally required materials and information (including but not limited to Material Safety Data Sheets) related to all Hazardous Materials located at any Facility where the Work is to be performed;
 - (j) Furnish SIEMENS with any contingency plans, safety programs and other policies, plans or programs related to any Facility where the Work is to be performed;
 - (k) Operate, service and maintain all Equipment according to the manufacturer's recommendations including those set forth in the manufacturer's operating manuals or instructions, as well as all requirements of Applicable Law or of authorities having jurisdiction. The CLIENT shall furnish all needed servicing and parts for said FIMs, which parts shall become part of the FIMs. Such Equipment shall be operated only in the specified operating environment, which shall be supplied by the CLIENT, including without limitation: (1) suitable electrical service, including clean, stable, properly conditioned power, to all Equipment; (2) telephone lines, capacity and connectivity as required by such Equipment; and (3) heat, light, air conditioning or other environmental controls, and other utilities in accordance with the specifications for the Equipment;
 - (l) Promptly notify SIEMENS of any unusual operating conditions, hours of usage, system malfunctions, installed equipment or building alterations that may affect the Equipment or energy usage or any Services;
 - (m) For Projects which include a water meter FIM, provide the required telecommunications between the data collectors and the front-end Meter Data Management (MDM) system from Substantial Completion through the Performance Guarantee Period, and,
 - (n) If applicable, provide and pay for a dedicated voice grade dial-up phone line, or a mutually agreed communication method, and install a terminal block, or an equivalent communication mechanism, in a mutually agreed upon location. All on-line service Equipment (excluding the phone line) will remain the property of SIEMENS unless otherwise stated herein.
- 6.2 Unless contrary to Applicable Law, the CLIENT acknowledges that the technical information contained in this Agreement is confidential and proprietary to SIEMENS and agrees not to disclose it or otherwise make it available to others without SIEMENS'S express written consent.
- 6.3 The CLIENT acknowledges that it is now and shall at all times remain in control of the Facility. Except as expressly provided herein, SIEMENS shall not be responsible for the adequacy of the health or safety programs or precautions related to the CLIENT'S activities or operations, the CLIENT'S other contractor(s), the work of any other person or entity, or Facility conditions. SIEMENS shall not be responsible for inspecting, observing, reporting or correcting health or safety conditions or

PERFORMANCE CONTRACTING AGREEMENT

deficiencies of the CLIENT or others at the Facility. So as not to discourage SIEMENS from voluntarily addressing health or safety issues while at the Facility, in the event SIEMENS does address such issues by making observations, reports, suggestions or otherwise, the CLIENT shall not hold, or attempt to hold, SIEMENS liable or responsible on account thereof.

Article 7

Changes and Delays

7.1 As the Work is performed, Applicable Law or conditions may change, or circumstances outside SIEMENS'S reasonable control may develop, which would require SIEMENS to expend additional costs, effort or time to complete the Work, in which case SIEMENS will notify the CLIENT and the Parties will negotiate an equitable adjustment to SIEMENS'S compensation and the time for performance. In the event such changes require the Work to be suspended or terminated, SIEMENS shall be compensated for Work previously performed.

7.2 Either party may request additions, deletions, modifications or changes to the Work. Any such requests shall only become effective upon execution of a written agreement by authorized representatives of both Parties after being formally approved by the CLIENT's governing authorities.

7.3 SIEMENS may, with CLIENT'S prior written consent (such consent not to be unreasonably withheld or delayed), substitute alternative parts, goods or equipment in the performance of the Work, provided that any such substitution shall be of an equal or better quality.

7.4 SIEMENS shall not be responsible for loss, delay, injury, damage or failure of performance that may be caused by circumstances beyond its control, including but not restricted to acts or omissions by the CLIENT or its employees, agents or contractors, Acts of God, war, civil commotion, acts or omissions of government authorities, fire, theft, corrosion, flood, water damage, lightning, freeze-ups, strikes, lockouts, differences with workmen, riots, explosions, quarantine restrictions, delays in transportation, or shortage of vehicles, fuel, labor or materials. In the event of such delay or failure, the time for performance shall be extended by a period equal to the time lost plus a reasonable recovery period, and if the delay is caused by CLIENT, the compensation shall be equitably adjusted to compensate for additional costs SIEMENS incurs due to such delay. If any such delay exceeds sixty (60) days, SIEMENS may terminate this Agreement upon three (3) days notice to the CLIENT and the CLIENT shall promptly pay SIEMENS for the allocable portion of the Work completed, and if the delay is caused by CLIENT, for any costs and expenses of termination.

Article 8

Compensation

8.1 The aggregate amount paid by CLIENT provides for and is solely in consideration of the Scope of Work and Services described in Exhibit A, and is detailed in Exhibit B.

8.2 SIEMENS will invoice the CLIENT in accordance with the schedules set forth in Exhibit B. Unless otherwise agreed in writing, invoices are due and payable within 45 days of receipt by the CLIENT. If the CLIENT disagrees with any portion of an invoice, it shall notify SIEMENS in writing of the amount in dispute and the reason for its disagreement within 45 days of receipt of the invoice, and shall pay the portion not in dispute.

8.3 SIEMENS may suspend or terminate the Work or Services at any time if payment is not received when due. In such event, SIEMENS shall be entitled to compensation for the Work or Services previously performed.

8.4 On amounts not paid within forty-five (45) days of invoice date, the CLIENT shall pay interest from invoice date until payment is received at the rate of 1.5% per month.

8.5 Except to the extent expressly agreed herein, SIEMENS'S fees do not include any taxes, excises, fees, duties or other government charges related to the Work or Services. The CLIENT shall pay such amounts or reimburse SIEMENS for any such amounts SIEMENS pays to the extent such charges are lawfully due and payable by CLIENT and have been paid or incurred by SIEMENS in furtherance thereof. If the CLIENT claims that the Work or Services is subject to a tax exemption or direct payment permit, it shall provide SIEMENS with a valid exemption certificate or permit.

8.6 All other work or services requested by the CLIENT, including but not limited to the following, shall be separately billed or surcharged on a time and materials basis:

(a) Emergency services, if inspection does not reveal any deficiency covered by the Scope of Work and Services, Exhibit A;

PERFORMANCE CONTRACTING AGREEMENT

- (b) Work and/or services performed at times other than during SIEMENS'S normal working hours, unless otherwise agreed to in Exhibit A; or
- (c) Work and/or services performed on equipment not covered by the Scope of Work and Services, Exhibit A.

Article 9

Acceptance

9.1 When SIEMENS believes that all, or an independent, definable phase or portion, of the Work is Substantially Complete, SIEMENS will submit a Certificate of Substantial Completion to the CLIENT which shall be subject to the following:

- (a) If the CLIENT concurs that the described portion of the Work as performed is Substantially Complete, the CLIENT will accept that Work by signing the Certificate of Substantial Completion and returning it to SIEMENS;
- (b) If the CLIENT does not concur that the Work is Substantially Complete, then the CLIENT shall notify SIEMENS within ten (10) business days of any discrepancies;
- (c) To the extent SIEMENS does not dispute the discrepancies raised by the CLIENT, SIEMENS shall correct the Work to conform to the description of the Work set forth herein, and resubmit the Certificate of Substantial Completion to the CLIENT;

(d) If SIEMENS disagrees with the discrepancies raised by the CLIENT, SIEMENS shall notify the CLIENT of a dispute and such dispute shall be resolved in accordance with Section 9.3 herein;

(e) If the CLIENT Representative does not deliver written notice to SIEMENS within thirty (30) calendar days of receiving the Certificate of Substantial Completion, in the mutual interests of the Project proceeding in a timely manner, the CLIENT will be deemed to have agreed to, signed and returned the Certificate of Substantial Completion.

9.2 To the extent that this Project requires multiple Certificates of Substantial Completion, the final Certificate of Substantial Completion shall determine the date on which the Construction Period is completed.

9.3 Any disputes concerning the determination that the Work is Substantially Complete will be resolved by submitting the issue to a third party professional engineering firm which is reasonably acceptable to both SIEMENS and the CLIENT. The determination of this firm with respect to completion or Substantial Completion will be non-binding upon the Parties, and will not affect the warranties for the Work and Services, or absolve SIEMENS of any liability it may have for any latent, hidden or otherwise undetectable defects that may exist in the Work and Services at Substantial Completion. In resolving any such dispute, the third-party professional engineering firm shall also allocate liability for payment of its fee between the Parties, after taking into consideration the merits of each party's position.

Article 10

Insurance and Allocation of Risk

10.1 SIEMENS shall maintain, at SIEMENS'S expense, the following insurances while performing the Work and shall add the CLIENT as an "Additional Insured" to each policy that is referenced in subsections (c) through and including (e) hereof:

- (a) Workers' Compensation at the statutory amounts and limits as prescribed by Applicable Law.
- (b) Employer's Liability insurance (and, where applicable, Stop Gap extended protection endorsement) limits of liability shall be:

- \$1,000,000 per occurrence
- \$1,000,000 Disease Policy
- \$1,000,000 Each Employee

(c) SIEMENS shall carry, in the Occurrence Coverage Form, Comprehensive General Liability or Commercial General Liability, insurance covering SIEMENS'S operations and providing insurance for bodily injury and property damage with limits of liability stated below and including coverage for:

- Products and Completed Operations
- Contractual Liability insuring the obligations assumed by SIEMENS in this Agreement
- Broad Form Property Damage (including Completed Operations)
- Explosion, Collapse and Underground Hazards
- Personal Injury Liability:

— Limits of liability shall be \$1,000,000 per occurrence/aggregate

PERFORMANCE CONTRACTING AGREEMENT

(d) SIEMENS shall carry Automobile Liability Insurance in the Occurrence Coverage Form covering all owned, hired and non-owned automobiles and trucks used by or on behalf of SIEMENS providing insurance for bodily injury liability and property damage liability for the limits of:

- \$1,000,000 per occurrence/aggregate

(e) SIEMENS shall carry Excess Liability Insurance in the Occurrence Coverage Form with limits of:

- \$5,000,000 per occurrence/aggregate

10.2 SIEMENS will maintain, at its own expense, property insurance written on a builder's "all-risk" or equivalent policy form in the amount of the initial Contract Price, plus the value of subsequent modifications and cost of materials supplied or installed by others, on a replacement cost basis without optional deductibles. Such property insurance shall be maintained, unless otherwise provided in the Contract Documents or otherwise agreed in writing by SIEMENS, until final payment has been received from CLIENT. The policy form shall include without limitation, insurance against the perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, collapse, earthquake, flood, windstorm, falsework, testing and start-up, rebuilding and debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for SIEMENS' services and expenses required as result of such insured loss. If the insurance requires deductibles or retentions, SIEMENS shall pay costs not covered because of such deductibles or retentions. This insurance shall cover portions of the Work off-site, and also portions of the Work in transit. Partial occupancy or use shall not commence unless the surety providing this coverage has consented to such partial occupancy or use by endorsement or otherwise. If applicable to the Work, SIEMENS shall purchase and maintain boiler and machinery insurance which shall specifically cover such insured objects until Acceptance. The insurance required by this section shall include the interests of the CLIENT, SIEMENS, subcontractor(s) and sub-subcontractor(s) in the Work.

10.3 Title and risk of loss of materials and Equipment furnished by SIEMENS shall pass to the CLIENT upon their delivery to the Facility, and the CLIENT shall be responsible for protecting them against theft and damage.

10.4 SIEMENS will indemnify the CLIENT from and against losses, claims, expenses and damages (including reasonable attorney's fees) for personal injury or physical damage to property (collectively "Damages"). Such indemnification shall be solely to the extent the Damages are caused by or arise directly from SIEMENS or its employees', consultants' or agents' negligent acts or omissions or willful misconduct in connection with SIEMENS'S performance of the Work or Services. SIEMENS'S obligations under this indemnity shall not extend to Damages arising out of or in any way attributable to the negligence of the CLIENT or its agents, contractors or employees. SIEMENS reserves the right to control the defense and settlement of any claim for which SIEMENS has an obligation to indemnify hereunder.

10.5 As to Patents and Copyrights:

(a) SIEMENS will, at its own expense, defend or at its option settle any suit or proceeding brought against the CLIENT in so far as it is based on an allegation that any Work (including parts thereof), or use thereof for its intended purpose, constitutes an infringement of any United States patent or copyright, if SIEMENS is promptly provided notice and given authority, information, and assistance in a timely manner for the defense of said suit or proceeding. SIEMENS will pay the damages and costs awarded in any suit or proceeding so defended. SIEMENS will not be responsible for any settlement of such suit or proceeding made without its prior written consent. In case the Work, or any part thereof, as a result of any suit or proceeding so defended is held to constitute infringement or its use by the CLIENT is enjoined, SIEMENS will, at its option and its own expense, either: (i) procure for the CLIENT the right to continue using said Work; (ii) replace it with substantially equivalent non-infringing Work; or (iii) modify the Work so it becomes non-infringing.

(b) SIEMENS will have no duty or obligation to the CLIENT under Section 10.5(a) to the extent that the Work is: (i) supplied according to the CLIENT'S design or instructions, wherein compliance therewith has caused SIEMENS to deviate from its normal course of performance; (ii) modified by the CLIENT or its contractors after delivery; or, (iii) combined by the CLIENT or its contractors with items not furnished hereunder, and by reason of said design, instruction, modification, or combination, a suit is brought against the CLIENT. If by reason of such design, instruction, modification or combination, a suit or proceeding is brought against SIEMENS, unless expressly prohibited by law, the CLIENT shall protect SIEMENS in the same manner and to the same extent that SIEMENS has agreed to protect the CLIENT under the provisions of Section 10.5(a) above.

(c) THIS SECTION 10.5 IS AN EXCLUSIVE STATEMENT OF ALL THE DUTIES OF THE PARTIES RELATING TO PATENTS AND COPYRIGHTS, AND DIRECT OR CONTRIBUTORY PATENT OR COPYRIGHT AND OF ALL THE

PERFORMANCE CONTRACTING AGREEMENT

REMEDIES OF THE CLIENT RELATING TO ANY CLAIMS, SUITS, OR PROCEEDINGS INVOLVING PATENTS AND COPYRIGHTS. Compliance with Section 10.5 as provided herein shall constitute fulfillment of all liabilities of the Parties under the Agreement with respect to the intellectual property indemnification.

10.6 The Parties acknowledge that the price for which SIEMENS has agreed to perform the Work and obligations under this Agreement was calculated based upon the foregoing allocations of risk, and that each Party has expressly relied on and would not have entered into this Agreement but for such allocations of risk.

Article 11

Hazardous Materials Provisions

11.1 The Work does not include directly or indirectly performing or arranging for the detection, testing, handling, storage, removal, treatment, transportation, disposal, monitoring, abatement or remediation of any contamination of any Facility at which Work is performed and any soil or groundwater at the Facility by petroleum or petroleum products (collectively called "Oil"), asbestos, PCBs or hazardous, toxic, radioactive or infectious substances, including any substances regulated under RCRA, CERCLA or any other Applicable Law (collectively called "Hazardous Materials"), including without limitation: ionization smoke detectors, ballasts, mercury bulb thermostats, used oil, contaminated filters, contaminated absorbents, and refrigerant. Except as expressly disclosed pursuant to Section 11.2, the CLIENT represents and warrants that, to the best of its knowledge following due inquiry, there are no Hazardous Materials or Oil present where the Work is to be performed. SIEMENS will notify the CLIENT immediately if it discovers or reasonably suspects the presence of any previously undisclosed Oil or Hazardous Material. All Services have been priced and agreed to by SIEMENS in reliance on the CLIENT'S representations as set forth in this Article. The discovery or reasonable suspicion of Hazardous Materials or hazardous conditions at a Facility where SIEMENS is to perform Work, or of contamination of the Facility by Oil or Hazardous Materials not previously disclosed pursuant to Section 11.2, shall entitle SIEMENS to suspend the Work immediately, subject to mutual agreement of terms and conditions applicable to any further Work, or to terminate the Work and to be paid for Work previously performed.

11.2 The CLIENT warrants that, prior to the execution of the Agreement, it notified SIEMENS in writing of any and all Oil or Hazardous Materials, to the best of its knowledge following due inquiry, known to be present, potentially present or likely to become present at the Facility and provided a copy of any Facility safety policies and information, including but not limited to lock-out and tag procedures, chemical hygiene plan, material safety data sheets, and other items covered or required to be disclosed or maintained by Applicable Law.

11.3 Regardless of whether Oil or Hazardous Material was disclosed pursuant to Section 11.2, the CLIENT shall be solely responsible for properly testing, abating, encapsulating, removing, disposing, remedying or neutralizing such Oil or Hazardous Materials, and for the costs thereof. Even if an appropriate change order has been entered into pursuant to Section 11.1, SIEMENS shall have the right to stop the Work until the Facility is free from Oil or Hazardous Materials. In such event, SIEMENS will receive an equitable extension of time to complete the Work. In no event shall SIEMENS be required or construed to take title, ownership or responsibility for such Oil or Hazardous Materials. The CLIENT shall sign any required waste manifests in conformance with all government regulations, listing the CLIENT as the generator of the waste. If someone other than the CLIENT is the generator of the waste, the CLIENT shall arrange for such other person to sign such manifests.

11.4 CLIENT agrees that it will be responsible to other parties for any damages, losses, costs, liabilities or expenses (including any attorneys' fees) arising out of CLIENT'S breach of, or failure to perform its obligations under this Article.

11.5 For purposes of this Article 11, in the context of the phrase "to the best of its knowledge following due inquiry"; "knowledge" means actual awareness of the facts by the CLIENT'S directors, officers, employees or agents, or the presence of relevant information contained in the CLIENT'S books or records; and, "due inquiry" means inquiry of those persons under the CLIENT'S control who should have knowledge of the subject matter of such inquiry.

Article 12

Miscellaneous Provisions

12.1 Notices between the Parties shall be in writing and shall be hand-delivered or sent by certified mail, express courier, or acknowledged telefax properly addressed to the appropriate party. Any such notice shall be deemed to have been received when delivered in-person or when sent by telefax, or five (5) business days subsequent to deposit in the U.S. mails, or one (1) day after deposit with express courier.

PERFORMANCE CONTRACTING AGREEMENT

12.2 Neither the CLIENT nor SIEMENS shall assign or transfer any rights or obligations under this Agreement, except that either party may assign this Agreement to its affiliates and SIEMENS may use subcontractors in the performance of the Work or Services. Nothing contained in this Agreement shall be construed to give any rights or benefits to anyone other than the CLIENT and SIEMENS without the express written consent of both Parties.

12.3 This Agreement shall be governed by and construed in accordance with the laws of the state or commonwealth within which the Facilities are located. With the exception of disputes arising under Article 4 or Article 9, any litigation arising under this Agreement shall be brought in the State or Commonwealth in which the Work is performed. The Parties waive any right to a jury trial on matters arising out of this Agreement.

12.4 This Agreement and all provisions of this Agreement allocating responsibility or liability between the Parties shall survive the completion of the Work, the Services, and the termination of this Agreement.

12.5 Intentionally Omitted.

12.6 SIEMENS'S performance of the Work and Services is expressly conditioned on the Parties assenting to all of the terms of this Agreement, notwithstanding any different or additional terms contained in any writing at any time submitted or to be submitted by a Party to the other Party relating to the Work or Services, even if signed by the Parties, unless the written statement expressly indicates that such terms supersede the terms of this Agreement.

12.7 Any provision of this Agreement found to be invalid, unlawful or unenforceable by a court of law shall be ineffective to the extent of such invalidity, and deemed severed herefrom, without invalidating the remainder of this Agreement. All other provisions hereof shall remain in full force and effect.

12.8 The waiver by a party of any breach by the other party of any term, covenant or condition hereof shall not operate as a waiver of any subsequent breach hereof. No waiver shall operate or be effective unless made in writing and executed by the party to be bound thereby.

12.9 In the event that Applicable Law or the CLIENT requires that SIEMENS procure a performance bond and/or a payment bond, SIEMENS shall provide a performance and payment bond in the amount defined as the Price in Section 1.1 of Exhibit B. The performance and payment bond will solely apply to the Work performed during the Construction Period and to the required statutory lien filing period thereafter. The performance and payment bond will not apply to any of the obligations included in the Performance Assurance, Exhibit C. Furthermore, the CLIENT'S funding source may be named as "Co-Obligee" on the performance bond if so requested by the CLIENT.

12.10 Per Miss. Code Ann. § 31-7-14(1)(b)(iv), the continuation of this Agreement is contingent upon the appropriation of funds to fulfill the requirements of the Agreement by the Legislature or other budgeting authority. If the Legislature or other budgeting authority fails to appropriate sufficient monies to provide for the continuation of the Project, the Agreement shall terminate on the last day of the fiscal year for which appropriations were made. The termination shall be without penalty or expense to CLIENT of any kind whatsoever, except as to the portions of payments for which funds were appropriated.

Article 13

Maintenance Services Program

13.1 If applicable, the scope of Services provided by SIEMENS for the Maintenance Services Program is stated in Exhibit A.

13.2 The CLIENT represents that all equipment not installed by SIEMENS under this Agreement and subject to a MSP is in satisfactory working condition. SIEMENS will have inspected all such equipment within the first thirty (30) days of MSP commencement or no later than the first scheduled inspection. Testing and inspection will not be deemed to be complete until all such equipment has been so tested and inspected.

13.3 If the equipment is altered or moved by any person, including the CLIENT, other than SIEMENS or a person authorized by SIEMENS, the CLIENT shall immediately notify SIEMENS in writing, and SIEMENS reserves the right to perform a reacceptance test on, or if necessary a re-commissioning of, the system at the CLIENT'S expense.

13.4 If SIEMENS reasonably determines as a result of such inspection and/or testing that any equipment requires repair or replacement, the CLIENT will be so notified and shall take corrective action within thirty (30) days, or such equipment shall be removed from coverage hereunder without further action by the Parties. SIEMENS is not liable or responsible for the continued testing, maintenance, repair, replacement or operating capabilities of any portion of the equipment until it has been inspected and/or tested and has been, if necessary, restored to an acceptable initial condition at the CLIENT'S sole expense. Any services provided by SIEMENS in the course of such restoration will be separately charged on a time and

PERFORMANCE CONTRACTING AGREEMENT

materials basis, and not included in fees paid hereunder. If individual items of equipment cannot, in SIEMENS'S sole determination, be properly repaired or replaced due to age, obsolescence, lack of availability of refrigerant gas, halon gas, necessary parts, materials, compatibility or otherwise, or as a result of excessive wear or deterioration, SIEMENS may, within ten (10) days of such inspection, give written notice that it is withdrawing such items from coverage under the MSP and adjust the MSP payments due hereunder accordingly.

13.5 If the removal of equipment from coverage would compromise or impair the integrity of the Work, Services or compliance with law of any system, then SIEMENS will provide a written statement thereof for execution by the CLIENT. The CLIENT'S failure to execute such statement within ten (10) days will void the MSP and release SIEMENS from any further obligations with respect to the MSP.

13.6 If the MSP scope of Services provides for equipment maintenance, repairs and/or replacements of equipment by SIEMENS, those Services are limited to restoring the proper working condition of such equipment. SIEMENS will not be obligated to provide replacement equipment that represents significant capital improvement compared to the original. Exchanged components become the property of SIEMENS, except Hazardous Materials, which under all circumstances remain the property and responsibility of the CLIENT.

Article 14

Equal Business Opportunity ("EBO")

14.1 SIEMENS agrees to make good faith efforts to meet the goals of CLIENT'S EBO policy and SIEMENS EBO plan, which is incorporated as part of this Agreement, by making available opportunities for MBEs (AABEs, HBEs, and ABEs) and FBEs for utilization in the Work, and shall take the following actions as part of its good faith efforts:

- (a) Notification to MBEs and FBEs that SIEMENS has subcontracting opportunities available and maintenance of records of the MBEs and FBEs responses.
- (b) Maintenance by SIEMENS of a file of the names and addresses of each MBE and FBE contracted and action taken with respect to each such contract.
- (c) Dissemination of SIEMENS EBO policy externally by informing and discussing it with all management and technical assistance sources; by advertising in news media and by notifying and discussing it with all subcontractors and suppliers.
- (d) Specific and continuing personal (both written and oral) recruitment efforts directed at MBE and FBE contractor organizations, MBE and FBE assistance organizations.
- (e) Sub-division of the contract into economically feasible segments as practice to allow the greatest opportunity for participation by MBEs and FBEs.
- (f) Increasing where possible the number of aggregate purchase items so as to eliminate the requirement of front-end purchases of material for as many MBE and FBE subcontractors as possible.
- (g) Adoption of the EBO Plan submitted with SIEMENS response to the Invitation for Bids or Request for Proposals obligations under this Agreement, as approved by the EBO Officer.
- (h) Submission of monthly reports on the forms and to the extent required by the EBO Officer, to be due on the last day of each month following the award of the Work.

14.2 SIEMENS further agrees that its breach of the EBO provisions contained herein shall subject it to any or all of the following penalties:

- (a) Withholding ten percent (10%) of all future payments under the involved eligible project until it is determined that SIEMENS is in compliance;
- (b) Withholding all future payments under the involved eligible project until it is determined that SIEMENS is in compliance.
- (c) Refusal of all future bids or offers for any eligible project with the City of Jackson or any of its departments or divisions until such time as SIEMENS demonstrates that there has been established and there shall be carried out of all the EBO provisions contained herein;
- (d) Cancellation of the eligible project

Exhibit A - Scope of Work and Services
City of Jackson, MS

Article 1: Scope of Work

- 1.1 **Description:** Except as otherwise expressly provided herein, SIEMENS shall provide each and every item of cost and expense necessary to implement the FIMs listed in Table 1.1 and described in Section 1.2, to upgrade the Facilities to reduce Operations and Maintenance expense, perform needed maintenance, and retrofit the CLIENT's water metering system to increase billable usage and reduce operations and maintenance expense (collectively, the "Work").

TABLE 1.1 – FIM/FACILITY MATRIX

Facility Name	Automatic Metering System Upgrade	WTP and Sewer Collection Line Repairs
City Water Metering System	X	
J.H. Fewell WTP		X
O.B. Curtis WTP		X
City Sewer Collection System		X

- 1.2 **Specific Elements:** The Work shall include the following:

- 1.2.1 **Automatic Metering System Upgrade** - Except as otherwise expressly provided herein, SIEMENS will provide all Equipment, material and labor to upgrade the CLIENT's water utility system as follows:

SIEMENS will install an Automatic Metering System to provide hourly reads as follows:

- Install 64,998 water meters with a Mueller Mi.Node Transmitter (or similar);
- Provide 340 water meters with a Mueller Mi.Node Transmitter (or similar) for inventory;
- Install sixty (60) Mi.Hub Collectors (or similar) to be installed on CLIENT assets;
- Install 900 network repeaters;
- Perform download of billing account data from the existing Customer Information System (CIS);
- Installation of standard meter data management system and server;
- Perform upload of new meter change information into the existing CIS prior to implementation of two modules: 1) customer care and billing ("Customer Care Module"), and 2) customer self service software ("Self Service Module") (collectively, the "Two Modules") ;
- Development and installation of the Customer Care Module and server;
- Development and installation of the Self Service Module and server;
- Provide a customized output from the Customer Care Module for periodic updating of the CLIENT's existing applications;
- Development and installation of a new document and bill publishing software module to include one (1) customized invoice template;
- Provide a customized output from the Customer Care Module and the new document and bill publishing system to be utilized by an external third party bill printing and delivery vendor (to be procured by the CLIENT). This will include the delivery of a bill image to be utilized for printing by the third party bill printing and delivery vendor;
- Hosting and bandwidth will be provided throughout the Construction Period, not to exceed a total of twenty-four (24) months, for the Customer Care Module and the Self Service Module;
- Hosting for the Mueller meter data management system will be provided for up to twenty-four (24) months during the Construction Period;
- Provide Interactive Voice Response (IVR) system vendor with standard XAI services or database call information relevant to the Customer Care Module;

Exhibit A - Scope of Work and Services
City of Jackson, MS

- Training to include:
 - Meter Maintenance staff – Field training of proper installation and maintenance of all system components;
 - Technical Support staff – 100 hours of off-site technical training on the Two Modules and various applicable output modules during the Construction Period;
 - Technical Support staff – Thirty-two (32) hours of on-site technical training on the fundamentals and implementation of the Customer Care Module;
 - Designated Future Trainers – Sixty-four (64) hours of off-site training for the CLIENT's designated trainers who will train new employees and users of the system;
 - System Operators – Sixty-four (64) hours of on-site training to include configuration and future operation of the Customer Care Module;
 - System Operators – 160 hours of on-site technical training on the immediate usage of the Customer Care Module prior to full implementation;
 - Technical Support Staff – Sixteen (16) hours of off-site training covering the Self Service Module;
 - Billing Department staff – 200 hours of individual user group (to include administrators, managers, supervisors, clerks, and technical support staff) off-site training specific to their role in utilizing the Two Modules;
 - Technical Support Staff – Technical training for the metering infrastructure components and operation of/integration into Muller meter data management system (or similar) to include collectors, wireless (& other) connectivity, and Network Repeaters.
- Commissioning/verification of the system;
- Operations & Maintenance manuals to include:
 - Equipment specification sheets for each component installed including meters, transmitters, Mi.Hub Collectors, Network Repeaters, data servers, and all ancillary Equipment;
 - Operation, maintenance, and training manuals, in both paper and electronic format, for the Equipment listed above;
 - Warranty Information on all provided Equipment (including servers).
- During the Construction Period, SIEMENS will provide up to 500 hours of post production technical support for one (1) year from the date that the new CIS goes live.

The necessary auxiliary Equipment such as curb stops, lids, nuts, boxes, bolts & gaskets will be provided as required to install water meters unless specifically noted in the table below. SIEMENS will be responsible for piping and valves for only two feet on either side of the meter. Any leaks in this area caused by the installation of the new meter will be repaired with like-for-like materials. SIEMENS will provide for the modification of up to forty-five (45) large meter vaults located in soft surfaces as required for installation of the large meters to include straight line piping modifications, vault wall modifications, and dirt excavation. SIEMENS will also provide training and administrative support prior to Substantial Completion of the FIM to ensure a functional system. The table below shows the meter quantities that SIEMENS will install for this FIM.

Exhibit A - Scope of Work and Services
City of Jackson, MS

Qty	Description
59,936	5/8" x 1/2" PD RDM Meter Replacement with Mi.Node (or similar)
2,409	1" PD Meter Replacement with Mi.Node (or similar)
517	1.5" PD Meter Replacement with Mi.Node (or similar)
1,552	2" PD Meter Replacement with Mi.Node (or similar)
490	4" Mag Meter Replacement with external battery
82	6" Mag Meter Replacement with external battery
6	8" Mag Meter Replacement with external battery
3	10" Mag Meter Replacement with external battery
3	12" Mag Meter Replacement with external battery
60	Mi.Hub Collectors (or similar) with solar power system (as applicable)
584	Mi.Nodes (or similar) with connectors for Mag Meters
5	Handheld Computers
900	Network Repeaters
220	5/8" x 1/2" PD RDM Meter with Mi.Node (or similar) for inventory
40	1" PD Meter Replacement with Mi.Node (or similar) for inventory
40	1.5" PD Meter Replacement with Mi.Node (or similar) for inventory
40	2" PD Meter Replacement with Mi.Node (or similar) for inventory

The following are the basis of design for the new CIS and represent the functionality to be provided through this FIM:

- Customer Care Module will include:
 - Base Software Module for Residential Customers
 - Credit and Collections for Residential Customers Module
 - Rating and Billing for Residential Customers Module
 - Cashiering for Residential Customers Module
 - Task Optimization Tools for Residential Customers Module
 - Archiving for Residential Customers Module
 - Base Software Module for Commercial and Industrial Customers
 - Credit and Collections for Commercial and Industrial Customers Module
 - Rating and Billing for Commercial and Industrial Customers Module
 - Cashiering for Commercial and Industrial Customers Module
 - Task Optimization Tools for Commercial and Industrial Customers Module
 - Archiving for Commercial and Industrial Customers
- Self Service Module will include:
 - Base Software Module for Residential Customers
 - Billing and Payment Management for Residential Customers Module
 - Customer Service Management for Residential Customers Module
 - Base Software Module for Commercial and Industrial Customers
 - Billing and Payment Management for Commercial and Industrial Customers Module
 - Customer Service Management for Commercial and Industrial Customers Module

Exhibit A - Scope of Work and Services

City of Jackson, MS

SIEMENS will provide data conversion Services of two (2) years worth of historical data from the Effective Contract Date for integration into the new CIS as follows:

- Accounts and Customers – The following customers and accounts will be converted along with their respective service agreements:
 - All active accounts as of the Effective Contract Date, limited to the total number of Installed Meters Guaranteed as defined in Section 4.2.1 of Exhibit C;
 - All accounts finalized within one year of the Effective Contract Date;
 - All accounts with a debit balance and finalized within three (3) years of the Effective Contract Date;
 - All accounts with a credit balance and finalized within seven (7) years of the Effective Contract Date.
- Budgets – All active budgets will be converted;
- Deposits – All active deposits will be converted;
- Bill History – Historical bills will be converted in a summary format;
- Payment History – Historical payments will be converted;
- Premises and Service Points – All active premises and service points and those finalized within one (1) year of the Effective Contract Date will be converted;
- Meters – All installed and in-stock meters will be converted.

The following items will not be converted for integration into the new CIS:

- Special payment plans or payment extensions;
- Credit and collections information;
- Pending or completed field orders.

CLIENT will provide the following upon request and within a reasonable amount of time during the Construction Period in order to ensure proper implementation of the FIM:

- In regards to commencing the customized output from the new document and bill publishing system, CLIENT must first select a single bill printing and delivery vendor, which shall be the basis of design for this portion of the Work;
- Provide input and validation of the new bill print format;
- Provide interpretation of data, codes and other requirements as it relates to the current CIS and future needs of the Customer Care Module;
- Data cleansing, as identified during the Construction Period;
- Provide file formats, examples and additional details as required for the outputs to be used with existing applications;
- Provide copies of all reports that are critical to business upon the Effective Contract Date. This will be limited to the standard report offerings plus up to fifteen (15) additional reports;
- Provide copies of up to ten (10) letter templates that are sent out based on activities in CIS;
- Provide information and support on the online payment options and customer self service options in effect as of the Effective Contract Date.

SIEMENS will provide a workforce training program that will focus on training and enlisting motivated individuals to enter or re-enter the workplace who currently face barriers to employment due to extended unemployment periods, incarceration, or military service. These services will include pre-screening assessment tools and staff. Siemens will provide 4,200 hours of actual on-the-job work training and work for these individuals to be performed throughout the Construction Period. The type of trade work will be limited to the following areas:

- Masonry
- Plumbing
- Electrical
- Carpentry

1.2.2 WTP and Sewer Collection Line Repairs - Except as otherwise expressly provided herein, SIEMENS will provide all Equipment, material and labor to perform the following:

Exhibit A - Scope of Work and Services

City of Jackson, MS

SIEMENS will provide parts, repairs, and upgrades to the J.H. Fewell Water Treatment Plant (WTP) as follows:

- Provide a one (1) year inventory of ultraviolet reactor system parts and supplies per the table below:

Description	Qty
Lamp	56
Sleeve, Quartz	12
Sleeve, Sensor	5
O-ring, Outer Access Port	56
O-ring, Sleeve Sealing	56
O-ring, Sensor Sleeve	56
Wiper Assembly	8
Wiper Seal Kit	64
Wiper Seal	16
Wiper, Sensor Sleeve	32
Washer, D-Style	4
Screw, 10-24 x 3/8 Shoulder	4
Screw – 4-40 x 3/8 Phillips, Diaphragm	4
Wiper Drive Screw Assembly	1
Motor Assembly, with Mount 90 VDC	1
Coupling Kit, Drive	1
Revolution Proximity Sensor	1
Reed Assembly, Homing 12-24 Sensor	2
Reed Assembly, Homing Sensor	1
Magnet Assembly, Homing	2
Wiper Lead Nut	2
O-ring, Wiper Yoke	4

Description	Qty
Seal Rod, Wiper Yoke	4
Wiper Assembly Sensor, Teflon	4
Seal, Wiper Sensor Sleeve	4
DC Drive, Wiper Motor	1
Magnet Assembly, Homing	1
Reed Assembly, Housing	1
Sensor Assembly, Double	1
Level Sensor	1
Relay, Mercury 100A	3
Cap 1.4mF 3000V	4
Cap 1.75mF 3000V	2
Relay, Ground Fault Digital	1
Ballast (Electromagnetic)	1
Fan, 114VCE 0.24A (6" x 6")	1
Fan Filter (5 Pack)	2
Fan, Gasket Seal (5 Pack)	2
Cleaner, Acti-Clean gel solution	13
Lamp, UVT	3
Ballast, UVT	1
Board, Driver Bipolar Stepper	1
Linear Motor Assembly	1
100% UVT Solution (1 Gallon)	1

- Chemical Feed Repairs
 - Inspection and replacement of existing motor, switchover valve, ammoniators, chlorinators, chlorine injector, chemical feed pumps, CL2 analyzers and associated piping;
 - Provide up to six (6) on-site visits (not to exceed 8 hours each) to calibrate and adjust the system to ensure proper operation;
- Provide quarterly service/maintenance labor for twenty-four (24) months during the Construction Period for Trojan ultraviolet system as follows:
 - Forty (40) hours on-site per quarterly visit to perform inspection and service of the system;
 - Thirty-two (32) hours of emergency service with 48-hour response time.
 - 24/7 telephone technical support;
- Cap existing water wells at Rainey Road, Forest Hill, Cedar Hills, and Presidential Hills as follows:
 - Remove the pump and column from the well;
 - Install minimum two inch (2") tubing to the bottom of the well and cement to the surface;
 - Remove concrete base and cut the casing three foot (3') below ground level;
 - Grade the top surface area of the well and contour to match the existing location;
 - Submit abandonment report to the Mississippi Department of Environmental Quality (MDEQ);
- Provide up to twenty-four months of service during the Construction Period for the Controls Systems, Inc. controls system as follows:
 - Limited to 400 total hours per year between the hours of 7:00 AM to 4:30 PM CST, Monday thru Friday;

Exhibit A - Scope of Work and Services

City of Jackson, MS

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- Two (2) hour response time during the hours defined above;
 - Minimum charge of one (1) hour per service call;
 - Drain and inspect existing clearwells in order to generate a detailed report of the existing condition;
 - Inspect and clean existing elevated water storage tanks located at Springridge, Forest, Livingston, Lynch, Riverside, and Suncrest.
 - Recoat Elaine water storage tank as follows:
 - Remove existing coatings;
 - Apply one (1) coat of zinc clad coating;
 - Apply one (1) coat of protective epoxy coating;
 - Apply one (1) coat of high gloss, polyurethane sealer;
 - Application of CLIENT's logo is included;
 - Exclusion: No tank repairs are included.
 - Replace Clearwell Pump #2
 - Worthington vertical turbine pump with 16MF mixed flow, water flush lubrication, 1175RPM, 73' TDH.
 - Removal and replacement of filter media for Filter #11 to include grouting as required and factory authorized inspection;
 - Replace main doors at Windsor Booster Station as follows:
 - Replace two (2) 3' X 6' 8" metal doors;
 - Repair block;
 - Paint to match building;
 - Fill in abandoned basins as identified in Attachment 1 to this Exhibit A as follows:
 - Remove and re-install fencing as needed for access;
 - Build temporary road for access to basins;
 - Provide and place MDOT standard fill material B-9 through B-15;
 - Grade to ensure positive drainage;
 - Install sod (irrigation to be provided by CLIENT);
 - Replace roof on fluoride building
 - Remove existing coal tar roof to structural concrete;
 - Adhere 1/8" tapered system with approved adhesive;
 - Adhere 1/4" sopraboard with approved adhesive;
 - Cold apply or heat weld modified bitumen base sheet;
 - Cold apply or heat weld modified bitumen cap sheet;
 - All edge metal to be removed and replaced with 0.040" aluminum;
 - Replace existing Sabre manual chlorine dioxide generator and feed system with similar type, size, and capacity unit.
 - Repair filters #17, #18, #19, #21, #22, and #26;
 - Replace check valve on pump #3;
 - Replace gate valve in clearwell;
 - Provide automation and controls for Laurel Street Gate;
 - Install keycard access on twenty (20) doors and the gate at Laurel Street. Includes all material, maglocks, readers, REX push buttons, cabling and labor.

SIEMENS will provide parts, repairs and upgrades to the O.B. Curtis WTP as follows:

- Provide a one (1) year inventory of ultraviolet reactor system parts and supplies according to the following table:

Exhibit A - Scope of Work and Services

City of Jackson, MS

Description	Qty
Lamp	54
Sleeve, Quartz	4
Sleeve, Sensor	1
O-ring, Outer Access Port	54
O-ring, Sleeve Sealing	54
O-ring, Sensor Sleeve	54
Wiper Assembly	8
Wiper Seal Kit	72
Wiper Seal	16
Wiper, Sensor Sleeve	48
Washer, D-Style	4
Screw – 10-24 x 3/8 Shoulder	4
Screw – 4-40 x 3/8 Phillips, Diaphragm	4
Wiper Drive Screw Assembly	1
Motor Assembly, with Mount 90 VDC	1
Coupling Kit, Drive	1
Revolution Proximity Sensor	1
Reed Assembly, Homing 12-24 Sensor	1
Reed Assembly, Homing Sensor	1
Magnet Assembly, Homing	1

Description	Qty
Wiper Lead Nut	1
Magnet Assembly, Homing	1
Reed Assembly, Housing	1
Sensor Assembly, Double	1
Level Sensor	1
Relay, Mercury 100A	2
Cap 1.4mF 3000V	2
Cap 1.75mF 3000V	2
Relay, Ground Fault Digital	1
Ballast (Electromagnetic)	1
Fan, 114VCE 0.24A (6" x 6")	1
Fan Filter (5 Pack)	2
Fan, Gasket Seal (5 Pack)	2
Cleaner, Acti-Clean gel solution	15
Lamp, UVT	3
Ballast, UVT	2
Board, Driver Bipolar Stepper	1
Linear Motor Assembly	1
100% UVT Solution (1 Gallon)	2

- Provide quarterly service/maintenance labor for twenty-four (24) months during the Construction Period for Trojan ultraviolet system as follows:
 - Forty (40) hours on-site per quarterly visit to perform inspection and service of the system;
 - Thirty-two (32) hours of emergency service with 48 hour response time;
 - 24/7 telephone technical support;
- Replace raw water and pre-oxidation perimeter lights with similar materials;
- Run signal wire in conduit for front-end turbidimeter for sedimentation basins to junction box at pre-treatment structure;
- Replace door on walk-in HV switch gear;
- Install two (2) 2' x 6' sluice gates with grating modifications as needed to original rapid mix for isolation during maintenance;
- Repair and recoat Dryvit building exterior finishes as follows:
 - Clean Dryvit on sludge building;
 - Clean Dryvit, patch cracks and holes, and repair cornice on east side of chemical feed building;
 - Clean coating on concrete, patch cracks and holes where coating delaminated at influent pump station;
 - Clean coating on concrete, patch cracks and holes in DryVit and coating on membrane building;
 - Clean DryVit, clean coating on concrete, patch cracks and holes in DryVit and coating on filter building;
 - Clean DryVit, recoat DryVit at sides and rear, recoat Dryvit to wainscot band on front of administration/lab building;
 - Clean coating on concrete foundation of high service pump building;
 - Clean coating on concrete, patch cracks and holes where coating has delaminated on pre-oxidation basin;
- Inspect and repair/replace four (4) 60 HP raw water pumps and associated variable frequency drives;
- Replace sludge plant roof as follows:
 - Install furring over existing shingle roof;
 - Install metal roof with exposed fasteners;

Exhibit A - Scope of Work and Services

City of Jackson, MS

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- Color to match existing building;
 - Replace existing 6,000 CFM dehumidification unit with new Bry-Air (or similar) packaged dehumidification system to include:
 - Control panel;
 - Rotor drive assembly;
 - Outlet dampers;
 - Structural skid mounted;
 - Pre-wired with disconnect switch;
 - Replace motor guards on High Service Pump #3;
 - Replace motor guards on High Service Pump #4;
 - Backwash Pump #11
 - Replace two (2) motor guards;
 - Replace vibration sensor;
 - High Service Pump #2
 - Replace expansion joint;
 - High Service Pump #5
 - Replace relief valve;
 - Replace two (2) start solenoids;
 - Replace motor guards;
 - Replace vibration sensor;
 - Backwash Pump #2
 - Replace vibration sensor;
 - Replace two (2) motor guards;
 - High Service Pump #10
 - Replace vibration sensor;
 - Replace two (2) motor guards;
 - Install 0-8 MGD Rosemont indicator on flow meter for Filter #3;
 - Install alternating board for filter gallery sump pumps;
 - Replace #2 spray wash valve on raw water screen;
 - Install sixteen (16) 624U Watson Marlow (or similar) two-headed diaphragm pumps for lime, ACH, polymer, and caustic and install new controls in chemical feed building;
 - Replace one (1) 3 HP, 3,450 RPM raw water pump for membrane pilot plant;
 - Fabricate and install covers for membrane building air compressors;
 - Inspect and perform miscellaneous repairs for all pH and turbidimeters as needed;
 - Install new remote controls board for Membrane Rapid Mix Basin #1;
 - Install new remote controls board for Membrane Rapid Mix Basin #2;
 - Provide parts to repair sluice gate motor on Train #1;
 - Provide parts to replace reject actuator and solenoid in membrane building;
 - Repair temperature meter on membrane tanks;
 - Replace all collapsed hoses in membrane recovery feed system;
 - Install two (2) new backup 2 HP sump pumps in chemical building;
 - High Service Pump #1
 - Replace motor guards;
 - High Service Pump #8
 - Replace bearings;
 - Repair pump and 800 HP motor;
 - Replace twenty-four inch (24") High Service Pump #1 flow meter;
 - Design and install gate valve to separate the two rapid mixers as follows:
 - Cut and demolish existing asphalt;
 - Install new forty-two inch (42") gate valve in existing pre-stressed pipe to include all fitting and evacuation shoring;
 - Backfill and repair asphalt;
 - Replace one (1) Philadelphia 15 HP back up mixer (or similar);
 - Replace twenty-four inch (24") High Service Pump #2 flow meter;
 - Replace float for filter gallery sump pump;
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Exhibit A - Scope of Work and Services

City of Jackson, MS

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- Repair two (2) 150 HP raw water pumps and motors and replace drives;
 - Miscellaneous SCADA additions
 - Read pH from SCADA system;
 - Program temperature display and trend output for raw water, high service water, and first tap;
 - Inspect and clean out raw water line from intake to plant
 - Inspection and cleaning will be performed over a thirty (30) day period by professional divers to include clam removal;
 - Before and after video will be provided;
 - Raw Water Pump #2
 - Replace pressure switch;
 - Replace solenoid valve;
 - Inspect/Repair plumbing;
 - Testing of the backup Nissan meter with results to be provided to the CLIENT;
 - Correct discrepancy between particle counter and computer display for Train #3;
 - Repair finished water pressure meter in High Service Bay #2;
 - Repair Centrifuge #1 as follows:
 - Remove and ship to repair facility;
 - Disassemble, clean and inspect rotating assembly including gearbox;
 - Repair register fits for solid and liquid bowl hubs;
 - Repair feed zone liner and accelerator and replace surface erosion protection;
 - Replace conveyor tiles as required;
 - Dynamically balance bowl and conveyor to ISO G1.0 tolerance;
 - Assemble conveyor with new bearings, seal and o-rings;
 - Assemble bowl hubs with new bearings, seal and o-rings;
 - Assemble gearbox with new bearings, seals and o-rings;
 - Replace rotor fasteners as required and paint bearing housings;
 - Perform four (4) hours function test;
 - Record vibration and bearing temperature readings;
 - Return shipping to CLIENT and re-install;
 - During the Construction Period, provide twenty-four (24) months of service, training, and monitoring for membrane ultra filtration equipment to include:
 - Automated data collection and web-accessible, graphical reporting;
 - Bi-weekly review of data and communication of issues to CLIENT;
 - Provide a semi-annual management report with analysis of key trends and recommendations to improve plant operation, membrane cleaning and overall performance;
 - 24/7 emergency telephone technical support;
 - Three (3) site visits by a factory service representative for five (5) days or forty (40) hours, commencing 8:00 AM on a Monday until this time has elapsed.
 - Provide one (1) year renewal of IFix Software, Allen Bradley (PLC's), and ACAD Software;
 - Replace six (6) plant computers to be used for maintenance supervisor, chemist, sludge building, plant engineer, HMI client, and HMI Historian;
 - Upgrade radios and interface for communication support and replace the radio repeater;
 - Install ten (10) security cameras in a location within the Water Treatment Plant to be selected by CLIENT;
 - Provide one (1) set of ultrafilters to replace damaged and unusable inventory. SIEMENS to provide material only;
 - Replace pump #4 and auxiliary boards in carbon room;
 - Repair membrane color analyzer;
 - Replace transfer pump for Membrane Manganese Analyzer;
 - Replace membrane air inlet valve;
 - Replace reject valve for train #1;
 - Repair fan on southeast compressor unit on membrane building roof;
 - Install HMI for Moryno pumps in discharge plant;
-

Exhibit A - Scope of Work and Services
City of Jackson, MS

- Conduct an electrical study as follows:
 - Coordinate all electrical circuits;
 - Develop one line diagram;
 - Complete flash arc study;
- Replace chlorine dioxide system;
- Replace drives for polymer gravity thickener;
- Provide programming for GT Pumps computer;
- Repair conventional filter surface wash system;
- Replace all eighteen (18) valves on the clarivac system;
- Repair Moryno pump #2.

SIEMENS will provide sewer collection line repairs at the below locations. This includes labor and material for a complete line repair as described. Asphalt repairs, erosion control, bypass pumping, select fill, traffic control, and fence removal/replacement are included on an as-needed basis.

- Wilshire Avenue
 - Remove and replace 600 linear feet of twenty-one inch (21") sewer line;
 - Remove and replace 400 linear feet of eighteen inch (18") sewer line;
 - Includes three (3) manholes;
 - Includes one (1) stream crossing;
- 300 Block of Rollingwood Drive
 - Remove and replace 1,140 linear feet of eight inch (8") and ten inch (10") sewer line;
 - Includes four (4) manholes;
 - Includes one (1) stream crossing;
- 2704 Quail Run at Eastover
 - Remove and replace 320 linear feet of twelve inch (12") sewer line;
- 2115 Robin Drive
 - Remove and replace 1,125 linear feet of twelve inch (12") sewer line;
 - Includes six (6) manholes;
- 220 Dixon Road to I-220
 - Remove and replace 1,200 linear feet of twelve inch (12") sewer line;
 - Includes three (3) manholes;
- East Northside Drive
 - Relocate 500 linear feet of sewer line from side of street to middle of street from Eastwood Road to Culleywood Drive;
 - Includes two (2) manholes;
- Pearl Street
 - Remove and replace 260 linear feet of eight inch (8") sewer line;
 - Includes two (2) manholes;
- 2234 West Highway 80
 - Repair of thirty inch (30") sewer line from Lynch Creek interceptor at Hattiesburg Street going west to the north turn of line;
- McClure Road at Meadow Lane
 - Replace 2,250 linear feet of fifteen inch (15") sewer line;
 - Replace ten inch (10") sewer line with a fifteen inch (15") sewer line from intersection of Meadow Lane and Wildwood Terrace to South Sunset Terrace;
- 3838 Eastover Drive to 3900 Eastover Drive
 - Replace six inch (6") sewer line with eight inch (8") sewer line;
 - Includes five (5) manholes;
- Beasley Road to Meadow Road
 - Repair of thirty inch (30") sewer line;
 - Includes two (2) stream crossings and lining of pipe;
- 2212 Heritage Hill Drive
 - Remove and replace 400 linear feet of eight inch (8") sewer line;
 - Includes one (1) manhole;

Exhibit A - Scope of Work and Services
City of Jackson, MS

- 5044 Wayneland Drive
 - Removal of 700 linear feet of six inch (6") sewer line;
 - Replace six inch (6") sewer line with eight inch (8") sewer line;
 - Includes two (2) manholes;
- South Drive/ Galvez Street to Jayne Avenue
 - Remove and replace 2,300 linear feet of twenty-one inch (21") sewer line;
 - Includes six (6) manholes;
 - Includes two (2) stream crossings;
- Liberty Street to Coleman Avenue
 - Remove and replace 60 linear feet of fifteen inch (15") sewer line;
 - Includes one (1) stream crossing.
- 1500 Block of Sheffield Drive
 - Repair 8" Sewer Line Collapse
- In addition to the afore mentioned projects, Siemens will allocate \$1,000,000 in cost for the inclusion of additional sewer line projects to be selected during construction from the below list.
 - Wilshire to Bailey Drive – CIPP line 18" line
 - Sunset Drive at Christian Brother Apartments – Repair 15" Sewer Line
 - Maple Street – Repair sewer line collapse of 36" & 15"

Siemens agrees to make good faith efforts toward meeting the goals of the CLIENT'S Jobs for Jacksonians Program which is committed to cultivating and ensuring the quality of life of its citizens, through various programs, employment, initiatives, and assistance. Siemens will assist the CLIENT in achieving its goal by strongly considering City residents for employment opportunities. Siemens anticipates this project creating up to 645 direct jobs and 400 indirect jobs.

- 1.3 **Technical Specifications, Drawings, and Exhibits:** The Work shall be performed in accordance with the following specifications, drawings and other attachments hereto, which are specifically incorporated herein and made part hereof: Exhibit A – Attachment 1
- 1.4 CLIENT's Responsibilities (in addition to those in Article 6 of the Agreement):
- 1.4.1 Respond to samples or documents submitted by SIEMENS to the CLIENT for review and approval within fifteen (15) business days.
- 1.4.2 Notify SIEMENS in writing of any Facility policies (e.g., safety) that affect the Work.

Article 2: Work Implementation Period

- 2.1 Commencement of Work: SIEMENS shall commence the Work ninety (90) calendar days from the Effective Contract Date, shall perform the Work diligently, and shall complete the Work no later than 910 calendar days from the day of commencement.

Article 3: Scope of Services-Performance Assurance Services Program (PASP)

- 3.1 PASP Services shall be performed during the Performance Guarantee Period unless terminated by CLIENT in accordance with Article 4 of the Agreement.
- 3.2 SIEMENS will provide the following Services and Deliverables:
- One annual Inspection of the Facilities and the FIMs.
 - One Annual Performance Assurance Report for all FIMs, including a reconciliation of Savings.

Exhibit A - Scope of Work and Services
City of Jackson, MS

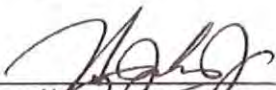
- Small meter (two inch and less) M&V in accordance with Article 4 of Exhibit C.
 - Annual large meter (over two inch) testing to validate the meter accuracy.
- 3.3 Annually, the CLIENT will provide a randomized composite list of current large meters (larger than two inches) in electronic format. SIEMENS will test a sample of these large meters for accuracy in accordance with Section 3.2 above.
- 3.4 In Annual Period 8 of the Performance Guarantee Period, SIEMENS will replace the external batteries for all meters four inches (4") and larger.
- 3.5 The PASP shall commence on the Guarantee Date. The Annual Performance Assurance Report will be provided within ninety (90) calendar days of the annual anniversary of the Guarantee Date.

Article 4: Scope of Services-Maintenance Services Program (MSP)

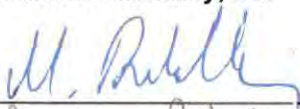
- 4.1 CLIENT has elected to self-implement maintenance. Therefore SIEMENS shall not perform any on-going maintenance services, although the Parties may negotiate a separate agreement for such services at a later date. CLIENT agrees that it will maintain the Equipment per manufacturer specifications and that it will operate the Equipment in accordance with the Contracted Baseline described in Article 7 of Exhibit C. If CLIENT fails to properly maintain or operate the Equipment, SIEMENS shall have the right to modify the Performance Guarantee pursuant to Article 4 of the Agreement.


By signing below, this Exhibit A is attached to and made a part of the Agreement between SIEMENS and the CLIENT.

CLIENT: City of Jackson, MS

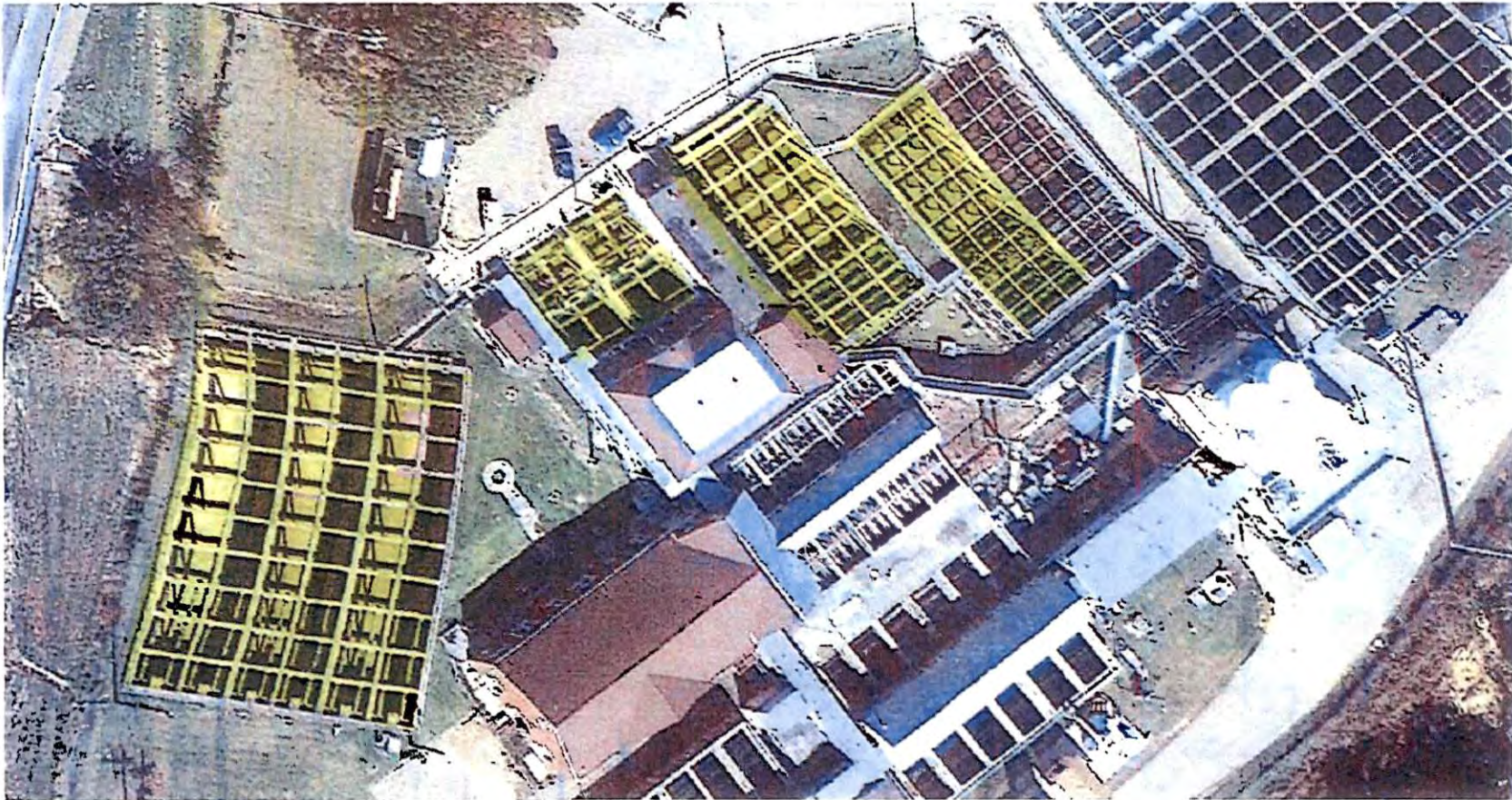
Signature: 
 Printed Name: Harvey Johnson, Jr.
 Title: Mayor
 Date: 12/28/12

SIEMENS: Siemens Industry, Inc.

Signature: 
 Printed Name: Matthias Rebellin
 Title: President
 Date: 1/30/13



COJ / SII Performance Contracting Agreement
Exhibit A – Attachment 1, Basins to be Filled at the J.H. Fewell WTP



NOTE: Highlighted basins to be filled in accordance with Section 1.2.2 of Exhibit A.

Exhibit B – Payment Schedules
City of Jackson, MS

Article 1: Payment for Scope of Work

- 1.1 **Price:** As full consideration of the Work as described in Exhibit A, Article 1: Scope of Work, the CLIENT shall pay to SIEMENS \$90,983,106 (plus taxes, if applicable).
- 1.2 **Escrow:** The CLIENT has agreed to deposit the Price into an Escrow Account at a financial institution satisfactory to both the CLIENT and SIEMENS. All expenses to establish the Escrow Account shall be the complete responsibility of the CLIENT and the CLIENT will receive all interest earnings from the Escrow Account. SIEMENS will submit periodic invoices to the CLIENT based on the Payment Schedule in Table B.1. The CLIENT shall be responsible for submitting the necessary documents to the Escrow Agent to allow for timely disbursements from the Escrow Account. The funding of the Escrow Account in an amount equal to or greater than the Price stated in Article 1.1 above shall be a condition precedent to SIEMENS obligation to perform or to continue the performance of the Work. If the Escrow Account is not funded within 60 days of the execution of this Agreement, this Agreement shall be null and void. This 60 day funding period may be extended as mutually agreed in writing by the Parties. In the event that the Agreement becomes null and void as described in this paragraph and CLIENT has previously authorized SIEMENS to proceed with the Work, the CLIENT shall be obligated to reimburse SIEMENS either: (i) for the Work performed to date; or (ii) for the Work specifically authorized by the CLIENT.
- 1.3 **Timely Payments:** The CLIENT agrees to pay SIEMENS per Table B.1. CLIENT agrees to pay all invoices submitted by SIEMENS per Article 8 of the Agreement.

Table B.1 – Anticipated Work Payment Schedule

Project Phase	Payments (\$)	Payments (%)
Month 1	\$7,187,664	7.9%
Month 2	\$5,186,036	5.7%
Month 3	\$3,002,442	3.3%
Month 4	\$9,280,276	10.2%
Month 5	\$3,366,375	3.7%
Month 6	\$3,366,375	3.7%
Month 7	\$3,366,375	3.7%
Month 8	\$3,366,375	3.7%
Month 9	\$3,366,375	3.7%
Month 10	\$3,366,375	3.7%
Month 11	\$3,366,375	3.7%
Month 12	\$3,366,375	3.7%
Month 13	\$3,275,392	3.6%
Month 14	\$3,275,392	3.6%
Month 15	\$3,275,392	3.6%
Month 16	\$3,912,273	4.3%
Month 17	\$3,548,341	3.9%
Month 18	\$3,275,392	3.6%
Month 19	\$3,275,392	3.6%
Month 20	\$3,275,392	3.6%
Month 21	\$3,275,392	3.6%
Month 22	\$3,002,442	3.3%
Month 23	\$1,637,696	1.8%
Month 24	\$1,637,696	1.8%
Month 25	\$454,916	0.5%
Month 26	\$454,916	0.5%
Month 27	\$454,916	0.5%

Exhibit B – Payment Schedules
City of Jackson, MS

Month 28	\$454,916	0.5%
Month 29	\$454,916	0.5%
Month 30	\$454,916	0.5%
PROJECT TOTAL:	\$90,983,106	100%

Article 2: Payment for Performance Assurance Services Program (PASP)

- 2.1 **Price:** As full consideration of the Services as described in Exhibit A, Article 3, the CLIENT shall pay to SIEMENS the amounts identified in Table B.2 plus taxes, if applicable, on the dates identified therein.
- 2.2 **Term:** The term of the PASP shall commence on the Guarantee Date and shall extend for either: (a) the term of the Performance Guarantee Period where multi-year obligations are allowed; or (b) for twelve (12) month periods corresponding to the term of each Annual Period.
- 2.3 **Automatic Renewal:** Where the PASP term is limited to an Annual Period, the PASP shall automatically renew for successive Annual Periods beginning on the anniversary date of Guarantee Date. Either party may request to amend the PASP at the end of an Annual Period by giving the other party at least sixty (60) days prior written notice of such amendments and such amendment shall be mutually negotiated by the Parties and effective upon a written amendment signed by both Parties prior to commencement of the next Annual Period. Each automatic renewal shall be and remain subject to the terms and conditions of this Agreement. SIEMENS obligations under the Performance Guarantee are dependent upon and subject to the express condition that the CLIENT maintains the PASP during the entire Performance Guarantee Period.
- 2.4 **Termination:** See Section 4.7 of the Agreement.

Table B.2 – PASP Payment Schedule

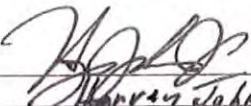
Annual Period	Annual Payments (\$)	Notes
1	\$242,000	Paid Quarterly in Arrears
2	\$249,260	Paid Quarterly in Arrears
3	\$256,738	Paid Quarterly in Arrears
4	\$264,440	Paid Quarterly in Arrears
5	\$272,373	Paid Quarterly in Arrears
6	\$280,544	Paid Quarterly in Arrears
7	\$288,961	Paid Quarterly in Arrears
8	\$297,629	Paid Quarterly in Arrears
9	\$306,558	Paid Quarterly in Arrears
10	\$315,755	Paid Quarterly in Arrears
11	\$325,228	Paid Quarterly in Arrears
12	\$334,985	Paid Quarterly in Arrears
13	\$345,034	Paid Quarterly in Arrears
14	\$355,385	Paid Quarterly in Arrears
15	\$366,047	Paid Quarterly in Arrears

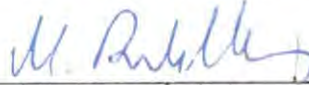
Exhibit B – Payment Schedules
City of Jackson, MS

By signing below, this Exhibit B is attached to and made a part of the Agreement between
SIEMENS and the CLIENT.

CLIENT: City of Jackson, MS

SIEMENS: Siemens Industry, Inc.

Signature: 
Printed Name: Harvey Johnson, Jr.
Title: Mayor
Date: 12/28/12

Signature: 
Printed Name: Matthew Rebellin
Title: President
Date: 11/20/13


approved by:

Exhibit C – Performance Assurance
City of Jackson, MS

The following Articles and Tables are hereby included and made part of this Exhibit C:

Article 1: Summary of Articles and Total Guaranteed Savings

Article 1	Summary of Articles and Total Guaranteed Savings
Article 2	Measurement and Verification Options
Article 3	Performance Guarantee Period Responsibilities of CLIENT
Article 4	Measurement and Verification Plan
Article 5	Baseline Data
Article 6	Utility Rate Structures and Escalation Rates
Article 7	Contracted Baseline Data

Table 1.1 – Total Guaranteed Savings (Units)

Performance Period	Small Meter Billable Usage Increase [1] (CCF)	Large Meter Billable Usage Increase [2] (CCF)	TOTAL
Construction	199,925	217,376	417,301
Annual Period 1	999,624	434,751	1,434,375
Annual Period 2	1,054,967	434,751	1,489,718
Annual Period 3	1,110,311	434,751	1,545,062
Annual Period 4	1,165,654	434,751	1,600,405
Annual Period 5	1,220,998	434,751	1,655,749
Annual Period 6	1,220,998	434,751	1,655,749
Annual Period 7	1,220,998	434,751	1,655,749
Annual Period 8	1,220,998	434,751	1,655,749
Annual Period 9	1,220,998	434,751	1,655,749
Annual Period 10	1,220,998	434,751	1,655,749
Annual Period 11	1,220,998	434,751	1,655,749
Annual Period 12	1,220,998	434,751	1,655,749
Annual Period 13	1,220,998	434,751	1,655,749
Annual Period 14	1,220,998	434,751	1,655,749
Annual Period 15	1,220,998	434,751	1,655,749
TOTAL	17,961,459	6,738,641	24,700,100

[1] "**Small Meter Billable Usage Increase**" means the additional hundred cubic feet or dollars that are generated by the installation of water meters two inches and smaller as a portion of the Automatic Metering System Upgrade FIM. This value is calculated by using the Baseline consumption for the applicable meter population, the existing utility rates, and the existing and proposed meter accuracies as described in this Performance Assurance, Exhibit C.

[2] "**Large Meter Billable Usage Increase**" means the additional hundred cubic feet or dollars that are generated by the installation of water meters larger than two inches as a portion of the Automatic Metering System Upgrade FIM. This value is stipulated to occur for each Annual Period of the Performance Guarantee Period.

- 1.1 Table 1.1 shows the CLIENT'S billable usage increase in the units of hundred cubic feet for each year of the Agreement. Table 1.2 shows the billable usage increase in dollars per year. These values are calculated using the units in Table 1.1 and multiplying by the appropriate water and sewer rate structures with NO ANNUAL ESCALATION APPLIED. Table 1.2 shows the CLIENT'S Operational Savings and Deferred Maintenance savings in dollars which are described in detail in the Tables 2.1, 2.2 and 2.3.
- 1.2 SIEMENS cannot and does not predict fluctuations in water and sewer rates. Therefore, the CLIENT and SIEMENS agree that the billable usage increase in dollars for each

Exhibit C – Performance Assurance
City of Jackson, MS

Annual Period will be calculated by multiplying the verified units of billable usage increase in CCF by the Annual Period's stipulated water and sewer rates and not the Annual Period's actual water and sewer rates.

- 1.3 SIEMENS guarantees that the increase in billable usage over the Baseline described in Article 5 of Exhibit C, through more accurate measurement, will be equal to or exceed the total Project cost in accordance with Article 7 of Exhibit C.
- 1.4 The determination of the annual weighted average accuracy of the test sample will follow current best practices, as defined by the AWWA Manual of Practice M6, unless otherwise agreed by the Parties.

Table 1.2 – Total Guaranteed Savings (Cost)

Performance Period	Small Meter Billable Usage Increase \$	Large Meter Billable Usage Increase \$	Operational Savings \$	Deferred Maintenance Savings \$	Total Savings \$
Construction	\$484,347	\$501,802	\$503,750	-	\$1,489,899
Annual Period 1	\$2,421,737	\$1,003,604	\$2,015,200	\$1,750,000	\$7,190,541
Annual Period 2	\$2,555,055	\$1,003,604	\$2,075,656	\$1,750,000	\$7,384,315
Annual Period 3	\$2,688,373	\$1,003,604	\$2,137,926	\$1,750,000	\$7,579,903
Annual Period 4	\$2,821,691	\$1,003,604	\$2,202,063	\$1,750,000	\$7,777,358
Annual Period 5	\$2,955,010	\$1,003,604	\$2,268,125	\$1,750,000	\$7,976,739
Annual Period 6	\$2,955,010	\$1,003,604	\$2,336,169	\$1,750,000	\$8,044,783
Annual Period 7	\$2,955,010	\$1,003,604	\$2,406,254	\$1,750,000	\$8,114,868
Annual Period 8	\$2,955,010	\$1,003,604	\$2,478,442	\$1,750,000	\$8,187,056
Annual Period 9	\$2,955,010	\$1,003,604	\$2,552,795	\$1,750,000	\$8,261,409
Annual Period 10	\$2,955,010	\$1,003,604	\$2,629,379	\$1,750,000	\$8,337,993
Annual Period 11	\$2,955,010	\$1,003,604	\$2,708,260	\$1,750,000	\$8,416,874
Annual Period 12	\$2,955,010	\$1,003,604	\$2,789,508	\$1,750,000	\$8,498,122
Annual Period 13	\$2,955,010	\$1,003,604	\$2,873,193	\$1,750,000	\$8,581,807
Annual Period 14	\$2,955,010	\$1,003,604	\$2,959,389	\$1,750,000	\$8,668,003
Annual Period 15	\$2,955,010	\$1,003,604	\$3,048,171	\$1,750,000	\$8,756,785
TOTALS	\$43,476,313	\$15,555,862	\$37,984,280	\$26,250,000	\$123,266,455

Article 2: Measurement and Verification Options

- 2.1 Measurement and Verification ("M&V") Options: There are five options to measure and verify energy/utility Savings: Option A – Retrofit Isolation: Key Parameter Measurement; Option B – Retrofit Isolation: All Parameter Measurement; Option C – Whole Facility; Option D – Calibrated Simulation; and Option E – Stipulated. Options A through D are part of the IPMVP. Option E – Stipulated is based on industry-accepted engineering standards and is the Option used for calculating Operational Savings.

Option A – Retrofit Isolation: Key Parameter Measurement. Savings are determined by field measurement of the key performance parameter(s) which define the energy use of the FIM's affected system(s) and/or the success of the Project. Measurement frequency ranges from short-term to continuous, depending on the expected variations in the measured parameter and the length of the reporting period. Parameters not selected for field measurement are estimated. Estimates can be based on historical data, manufacturer's specifications, or engineering judgment. Documentation of the source or justification of the estimated parameter is required. The plausible savings error arising from estimation rather than measurement is evaluated. If applicable, the predetermined schedule for data collection, evaluation, and reporting is defined in Exhibit A, Article 3 – Performance Assurance Services Program.

Exhibit C – Performance Assurance
City of Jackson, MS

Option B – Retrofit Isolation: All Parameter Measurement. Savings are determined by field measurement of the energy use of the FIM-affected system. Measurement frequency ranges from short-term to continuous, depending on the expected variations in the Savings and the length of the reporting period. If applicable, the predetermined schedule for data collection, evaluation, and reporting is defined in Exhibit A, Article 3 – Performance Assurance Services Program.

Option C – Whole Facility: Savings are determined by measuring energy use at the whole Facility or sub-Facility level. Continuous measurements of the entire Facility's energy use are taken throughout the reporting period. If applicable, the predetermined schedule for data collection, evaluation, and reporting is defined in Exhibit A, Article 3 – Performance Assurance Services Program.

Option D – Calibrated Simulation: Savings are determined through simulation of the energy use of the whole Facility, or of a sub-Facility. Simulation routines are demonstrated to adequately model actual energy performance measured in the Facility. This Option usually requires considerable skill in calibrated simulation. If applicable, the predetermined schedule for data collection, evaluation, and reporting is defined in Exhibit A, Article 3 – Performance Assurance Services Program.

Option E – Stipulated: This Option is the method of measurement and verification applicable to FIMs consisting either of Operational Savings or where the end use capacity or operational efficiency; demand, energy consumption or power level; or manufacturer's measurements, industry standard efficiencies or operating hours are known in advance, and used in a calculation or analysis method that will stipulate the outcome. Both CLIENT and SIEMENS agree to the stipulated inputs and outcome(s) of the analysis methodology. Based on the established analytical methodology the Savings stipulated will be achieved upon completion of the FIM and no further measurements or calculations will be required during the Performance Guarantee Period. If applicable, the methodology and calculations to establish Savings value will be defined in Section 4.6 of this Exhibit C.

2.2 Table 2.1 below summarizes the first Annual Period's Guaranteed Savings (See Article 1, Tables 1.1 and 1.2) utilizing the applicable Measurement and Verification Options as applied to the referenced FIMs valued pursuant to the agreed upon amounts identified in Article 6 hereof.

Table 2.1 – Savings for First Annual Period by M&V Option

FIM	Energy/Utility Savings \$						Operational Savings \$	Total Savings \$
	M&V Options							
	A Retrofit Isolation: Key Parameter Measurement	B Retrofit Isolation: All Parameter Measurement	C Whole Facility	D Calibrated Simulation	E Stipulated	Total Energy/Utility Savings	E Stipulated	
Automatic Metering System Upgrade	\$2,421,737	-	-	-	\$1,003,604	\$3,425,341	\$2,015,200	\$5,440,541
WTP and Sewer Collection Line Repairs	-	-	-	-	-	-	\$1,750,000	\$1,750,000
TOTALS	\$2,421,737	-	-	-	\$1,003,604	\$3,425,341	\$3,765,200	\$7,190,541

2.3 Table 2.2 identifies the source of Operational Savings defined and quantified by the Parties. The Parties affirm that such amounts are Stipulated Savings for purposes of calculating Annual Realized Savings and acknowledge that the Guaranteed Savings identified herein have been based on CLIENT'S affirmation. **OPERATIONAL SAVINGS**

Exhibit C – Performance Assurance
City of Jackson, MS

SHALL NOT BE MEASURED OR MONITORED DURING THE PERFORMANCE GUARANTEE PERIOD.

Table 2.2 - Source of Operational Savings

Account/Vendor	Description	Annual Cost \$	# of Annual Periods Savings Are Applied	Annual Period Savings Begin
Manpower	Avoided future employment needs through elimination of new employee requisitions	\$476,000	15	1
Reduction in City Vehicles	Fewer vehicles needed for meter reading	\$46,200	15	1
Reduction in Fuel Consumption	Less fuel consumed for meter reading	\$33,000	15	1
Manpower	Fewer re-reads and less work associated with meter reading	\$400,000	15	1
Meter/Lid Purchases	Less replacement meter/lid purchase requirements	\$240,000	15	1
Manpower	Less work associated with shutoffs/restore of service	\$800,000	15	1
Billing System Maintenance	Elimination of existing billing system maintenance expenditures	\$20,000	15	1
Construction Savings	Portion of the above items that will be achieved during the Construction Period	\$503,750	1	Construction Period
O&M Maintenance*	Avoided Deferred Maintenance costs associated with Water Treatment Plants and the City Sewer Collection System	\$1,750,000	15	1

* O&M Maintenance savings are associated with Deferred Maintenance and are applied with NO ANNUAL OPERATIONAL SAVINGS ESCALATION. These repairs are due to the aging equipment currently in place and are included in the existing and future budgets of the City. These costs include the material cost, the installation cost, and financing costs associated with the repairs.

2.4 SIEMENS has explained to the CLIENT and the CLIENT has satisfied itself as to how Operational Savings are incorporated into the Annual Realized Savings.

2.5 The Escalation Rate applicable to the Operational Savings is 3%.

Article 3: Performance Guarantee Period Responsibilities of the CLIENT

In addition to the CLIENT'S responsibilities under Article 6 of the Agreement, this Article details the responsibilities of the CLIENT in connection with the management and administration of the Performance Guarantee.

3.1 The CLIENT will provide a representative at each Facility to coordinate the Work and provide required data described below.

3.2 The CLIENT will provide SIEMENS with accurate operating information as defined below and in the Contracted Baseline article of this Exhibit C during each Annual Period, within thirty (30) days of any Material Change that may increase or decrease water usage.

- a) Annually provide monthly number of water meter accounts
- b) Annually provide monthly database records of billing information including but not limited to metering dates, billing date, billed water, billed cost, meter size, meter number and address within local, state and federal privacy limitations. This information shall only be used for the sole purposes of this Agreement.

Exhibit C – Performance Assurance
City of Jackson, MS

- c) Annually provide copies of all water and sewer rate schedules used for billing during the previous 12 month period if changed from the previous year.
 - d) Annually provide monthly purchased, pumped, and/or distributed water volumes from the water plant records
- 3.3 CLIENT will provide SIEMENS with the following data within thirty (30) days of receipt by CLIENT or provide access to utility vendor information.
 - (a) Number of water meter accounts by size
 - (b) Summary billing information on the amount of water sold by meter size
 - (c) Water volume purchased, pumped and distributed from the water plant records
- 3.4 If required for the Work, CLIENT will provide telephone/data remote access as SIEMENS reasonably requests. All charges related to telephone/data line installation, activation and communication services are the responsibility of the CLIENT.
- 3.5 If required for the Work, CLIENT will provide and coordinate utility meter upgrade for interface with SIEMENS metering and data collection. All charges related for these upgrades are the responsibility of the CLIENT.
- 3.6 CLIENT will annually assist with the meter testing, including providing a listing of all meters installed in the system, and providing access, notification and scheduling of meter replacements as deemed necessary by the CLIENT.

Article 4: Measurement and Verification ("M&V") Plan

The following information is applicable to this Agreement:

- Article 4.1 General Overview
- Article 4.2 Option A – Retrofit Isolation: Key Parameter Measurement
- Article 4.3 Option B – Retrofit Isolation: All Parameter Measurement
- Article 4.4 Option C – Whole Facility
- Article 4.5 Option D – Calibrated Simulation
- Article 4.6 Option E – Stipulated: Operational and Utility Savings

4.1 General Overview –

The purpose of the M&V Plan is to identify the methods, measurements, procedures and tools that will be used to verify the Savings for each FIM which has energy/utility Savings. Savings are determined by comparing prior usage, consumption or efficiencies (defined as the "Baseline") against the post-FIM implementation usage, consumption or efficiencies. The Baseline usage, consumption or efficiencies are described in this Exhibit C, Article 5. The post-FIM implementation usage, consumption or efficiencies is defined as the Contracted Baseline and are described in this Exhibit C, Article 7.

4.2 Option A - Retrofit Isolation: Key Parameter Measurement

4.2.1 Automatic Metering System Upgrade

This section shall apply only to the small meters (two inches and smaller) included in this FIM. The Performance Guarantee applicable to this FIM and to the M&V process for this FIM is that a new, positive displacement water meter will mechanically wear in response to two primary factors: the amount of cumulative water and age. Meters with greater amounts of cumulative water measured at any given time are likely to be less accurate than meters with lower accumulated reading due to increased wear accompanying the increased amount of measured water. Age is also a contributing factor in meter accuracy. In the M&V phase, the bulk of the meters will be the same age, thus targeting high cumulative flow meters is justified in addition to a sampling approach for the total population of meters.

Exhibit C – Performance Assurance
City of Jackson, MS

Meter testing will be performed on a sampling of meters (two inches and smaller) annually to confirm that the meters maintain the desired level of accuracy.

Refer to the guaranteed accuracy tables, Table 5.7 – Existing Small Meter Accuracy and Table 7.2 – Proposed Small Meter Accuracy. The meter information will be tested to AWWA standards and the sampling approach provides a high confidence level that the meters are maintaining the desired accuracies.

Annually, throughout the Performance Guarantee Period, the CLIENT will provide a randomized composite list of current meters in electronic format. SIEMENS will remove, replace and test a sample of these meters for accuracy. The meters will be randomly selected based on a sort of the meter's cumulative water (water measured over its lifetime) such that the sample is representative of the entire meter population with meters in the low, intermediate and high cumulative flow levels. The sampling guidelines of Table 4.2a will be used to select the appropriate number of meters to be tested.

The accuracy tests will be based on AWWA standards for testing residential water meters per AWWA Manual M6. The formulation for that testing is as follows:

For a true test of a water meter at all flow rates, AWWA standards recommend first testing low, medium, and high flow rates and then calculating the aggregate meter efficiency by weighted formula. The three test points (High, Med, and Low flow) are weighted 15%, 70%, and 15%. The formula for meter accuracy is as follow:

$$\begin{aligned} & (15\% \times \text{Measured Efficiency @ High flow}) \\ & + (70\% \times \text{Measured Efficiency @ Medium flow}) \\ & + (15\% \times \text{Measured Efficiency @ Low flow}) \\ & \text{Average Weighted Efficiency of the Meter*} \end{aligned}$$

(*reference: AWWA Meter Manual M6, Fourth Edition; pg 60, "Meter Testing")

The tested meters will be subsequently returned to the water authority for use as future maintenance replacements, reactivations, or for new customer accounts if the tested condition is within acceptable meter performance parameters as determined by SIEMENS. Otherwise the tested meters will be returned to the manufacturer for repair under warranty and then returned to the CLIENT's inventory.

The sample size for the random testing is selected to correspond to an 80% confidence level and a 20% precision level as a starting point. The specific selection of these meters is performed by a random number generator that arbitrarily selects accounts from the Baseline meter account list.

Table 4.2a Sampling Guidelines	
Confidence	80%
Precision	20%
Population	Number of Samples
1	1
2	2
3	3
4	3
5-6	4
7-9	5
10-13	6
14-19	7

Exhibit C – Performance Assurance
City of Jackson, MS

20-29	8
30-49	9
50-110	10
>110	11

The total count of meters to be tested is the algebraic sum of the targeted sample and the random sample.

If the meters tested within any Annual Period are above the guaranteed accuracy listed in Table 7.2 – Proposed Small Meter Accuracy, the meter accuracy will be deemed acceptable. In the event that the average tested meter accuracy is below the guaranteed accuracy, SIEMENS will conduct a review of the test data. Any meter that tests below the manufacturer's accuracy guarantee will be replaced through the manufacturer's warranty process. The test results will be removed from the average and an additional round of testing at SIEMENS' expense will be conducted to determine if the meters are reading inaccurately or if there is a warranty issue with the meters.

If the additional testing is performed and SIEMENS determines that the results do not prove to be equal or greater than the guaranteed accuracy, SIEMENS may discontinue the testing and enter into the issue resolution process. If the meters are performing below the manufacturers warranted accuracy range, SIEMENS will assist CLIENT with obtaining replacement meters through the warranty process with the manufacturer. If the meters are performing below the guaranteed accuracy, but within the manufacturers warranted accuracy range, SIEMENS will accept the financial responsibility as calculated in the Annual Performance Assurance Report. The revenue calculation will be based on the difference between the guaranteed accuracy as defined in Table 7.2 – Proposed Small Meter Accuracy and the results of the sample testing for that Annual Period. The revenue calculation will be based on the dollar rate schedule contained in the Baseline data listed below in Table 6.1 – Water Rate Structures.

As mentioned, the calculation of total additional water billed resulting from the small meters included in this FIM will be based on a comparison between the average efficiency of the old meter population (those meters in the Baseline) and the tested efficiency of the new meters. The increase in efficiency (differential meter efficiency) is multiplied by the Baseline annual cumulative water for the system or meter size grouping, as applicable. The result is the amount of recaptured water for the system or that meter group. This process is repeated for each meter group in the Baseline listing, if applicable. The sum of these amounts of reclaimed water is the unbilled water applicable to the small meters under the Performance Guarantee. This calculated amount of reclaimed water is compared to the amount of reclaimed water guaranteed. If the calculated amount is higher than the guaranteed accuracy, then the Performance Guarantee is deemed achieved for that Annual Period. The consumption baseline shown in Table 5.1 is mutually-agreed by the Parties.

Any sewerage revenue associated with the reclaimed water calculated will be included in any revenue reconciliation and is considered part of the Performance Guarantee. This approach ensures the CLIENT that the projected performance will be maintained throughout the term of the Performance Guarantee Period.

Annually SIEMENS will present these M&V results to the CLIENT, and then the Parties will jointly present the results to the City board or council.

4.3 **Option B – Retrofit Isolation: All Parameter Measurement:** Not Applicable

4.4 **Option C – Whole Facility:** Not Applicable

4.5 **Option D – Calibrated Simulation:** Not Applicable

Exhibit C – Performance Assurance
 City of Jackson, MS

4.6 Option E – Stipulated: Operational and Utility Savings

4.6.1 Automatic Metering System Upgrade

The reported Operational Savings used in the calculations for this FIM are stipulated for each Annual Period of the Performance Guarantee Period and were mutually agreed upon by the CLIENT and SIEMENS after discussion and review. The Operational Savings are agreed to occur by reducing the effort associated with the Baseline manual meter reading, the reduction in overall staff required to perform monthly meter reading tasks, less equipment and fuel required to perform meter reading tasks, and less effort required to perform shutoffs and service restores.

The reported large meter (larger than two inches) billable usage increase used in the calculations for the FIM are stipulated for each Annual Period of the Performance Guarantee Period and were mutually agreed upon by the CLIENT and SIEMENS after discussion and review. The large meter billable usage increase is agreed to occur as a result of the replacement of the existing water meters with new, high accuracy water meters.

Article 5: Baseline Data

- 5.1 The year selected as the Baseline Period starts on January 2011 through December 2011. Table 5.1 outlines the water consumption that occurred during this Baseline Period applicable to the small water meters. This Baseline consumption will be used as the reference for comparing the system's consumption during the Performance Guarantee Period in order to determine the Annual Realized Savings. The consumption baseline shown in Table 5.1 is mutually-agreed by the Parties.

As mentioned in Section 4.2.1, the calculation of total additional small meter billable water resulting from the Automatic Metering System Upgrade FIM will be based on a comparison between the average accuracy of the old meter population (those meters in the Baseline) and the accuracies of the new small meters. The increase in accuracy (differential meter accuracy) is multiplied by the Baseline annual cumulative water for the system or meter size grouping, as applicable. The result is the amount of recaptured water for the system or that meter group. The following table shows the results of the Baseline analysis and shows the amount of recaptured water for the system associated with the given meter sizes and classifications.

Exhibit C – Performance Assurance
City of Jackson, MS

Table 5.1 Baseline Consumption for Automatic Meter System Upgrade FIM

Year 1 - Annual Small Meter Revenue Calculations

Description	Existing Consumption at 100% Accuracy (CCF)	Existing Meter Accuracy %	Existing Consumption (CCF)	New Meter Accuracy %	Consumption Billed with New Meters (CCF)	Annual Consumption Increase (CCF)	Annual Consumption Increase (\$)
Water - 5/8" Inside Group 1	1,409,097	87.10%	1,227,323	98.50%	1,387,960	160,637	\$398,380
Water - 5/8" Inside Group 2	1,250,424	87.10%	1,089,120	98.50%	1,231,668	142,548	\$353,520
Water - 5/8" Inside Group 3	865,299	87.10%	753,675	98.50%	852,319	98,644	\$244,637
Water - 5/8" Inside Group 4	1,026,213	87.10%	893,832	98.50%	1,010,820	116,988	\$290,131
Water - 5/8" Inside 1 Mile	271,828	87.10%	236,761	98.50%	267,751	30,990	\$153,703
Water - 5/8" Outside 1 Mile	213,325	87.10%	185,806	98.50%	210,125	24,319	\$35,992
Water - 1" Inside	473,024	93.40%	441,805	98.50%	465,929	24,124	\$59,828
Water - 1" Inside 1 Mile	9,655	93.40%	9,018	98.50%	9,510	492	\$2,442
Water - 1" Outside 1 Mile	8,346	93.40%	7,795	98.50%	8,221	426	\$630
Water - 1.5" & 2" Inside	1,663,006	94.70%	1,574,867	98.50%	1,638,061	63,194	\$156,722
Water - 1.5" & 2" Inside 1 Mile	8,757	94.70%	8,292	98.50%	8,625	333	\$1,650
Water - 1.5" & 2" Outside 1 Mile	11,669	94.70%	11,051	98.50%	11,494	443	\$656
Water - 5/8" Inside Group 1	711,456	87.10%	619,679	98.50%	700,785	81,106	\$174,378
Sewer - 5/8" Inside Group 2	715,783	87.10%	623,447	98.50%	705,046	81,599	\$175,438
Sewer - 5/8" Inside Group 3	483,264	87.10%	420,923	98.50%	476,015	55,092	\$118,448
Sewer - 5/8" Inside Group 4	547,104	87.10%	476,527	98.50%	538,897	62,370	\$134,095
Sewer - 5/8" Inside 1 Mile	6,320	87.10%	5,505	98.50%	6,225	720	\$1,549
Sewer - 5/8" Outside 1 Mile	970	87.10%	844	98.50%	955	111	\$238
Sewer - 1" Inside	195,182	93.40%	182,300	98.50%	192,254	9,954	\$21,402
Sewer - 1" Inside 1 Mile	827	93.40%	773	98.50%	815	42	\$91
Sewer - 1" Outside 1 Mile	0	93.40%	0	98.50%	0	0	-
Sewer - 1.5" & 2" Inside	1,196,200	94.70%	1,132,801	98.50%	1,178,257	45,456	\$97,730
Sewer - 1.5" & 2" Inside 1 Mile	944	94.70%	894	98.50%	930	36	\$77
Sewer - 1.5" & 2" Outside 1 Mile	0	94.70%	0	98.50%	0	0	-
TOTALS	11,068,693		9,903,038		10,902,662	999,624	\$2,421,737

5.2 The performance Baseline used for ongoing comparison of future meter test results is as follows:

- (a) Baseline year (full 12 months) – January 2011 through December 2011
- (b) The Baseline meter testing data are included as Table 5.7.

Exhibit C – Performance Assurance
City of Jackson, MS

- (c) The Baseline existing consumption is shown in Table 5.1. This Baseline consumption remains fixed throughout the Guarantee Period and is the basis for comparison throughout the entire Guarantee Period.
 - (d) The CLIENT'S water and sewer billing rate schedules in force during the Baseline Period are used for revenue calculations. This will be the basis for any financial calculations henceforth, and not a water billing rate schedule from any other year.
- 5.3 The Baseline Period is chosen using the most recent 12 months of continuous data available through the existing utility billing system.
- 5.4 The number of meters and sizes is documented as part of the Baseline. This is to assure that variances in installed meter counts and associated meter sizes are not inconsistent with the Baseline. SIEMENS does not assume responsibility for loss of water consumption within the water district due to declines in installed capability to supply water.
- 5.5 Variances in population are not considered in the Baseline. SIEMENS does not assume responsibility for loss of water consumption within the water district due to population declines.
- 5.6 Meter testing was performed on a representative sampling of meters to provide the pre-measurement system average level of accuracy for all meters. The meters were tested to AWWA standards and the sampling approach provides a high confidence level that the meters are indeed inefficient compared to new meter accuracies.

The CLIENT provided a complete account download of historical data for each metered account, including but not limited to: monthly consumption, meter size, meter installation data, meter serial number, billed charges, account number, and account ID.

Based on AWWA guidelines for meter sampling and testing, a random sample of the meters were selected, removed from service, and delivered to a third-party testing facility with the Baseline results presented in Table 5.7. The accuracy tests will be based on AWWA standards for testing residential water meters per AWWA Manual M6. For a true test of a water meter at all flow rates, AWWA standards recommend first testing low, medium, and high flow rates and then calculating the aggregate meter efficiency by weighted formula. The three test points (High, Med, and Low flow) are weighted 15%, 70%, and 15%. The formula for meter accuracy is as follow:

$$\begin{aligned} & (15\% \times \text{Measured Efficiency @ High flow}) \\ & + (70\% \times \text{Measured Efficiency @ Medium flow}) \\ & + (15\% \times \text{Measured Efficiency @ Low flow}) \\ & \text{Average Weighted Efficiency of the Meter*} \end{aligned}$$

(*reference: AWWA Meter Manual M6, Fourth Edition; pg 60, "Meter Testing")

- 5.7 The calculation of total additional water billed resulting from the Automatic Metering System Upgrade FIM will be based on a comparison between the average efficiency of the old meter population (those meters in the Baseline) and the efficiency of the new small meters. The increase in efficiency (differential meter efficiency) is multiplied by the Baseline annual cumulative water for the system or meter size grouping, as applicable. The result is the amount of recaptured water for the system or that meter group. This process is repeated for each meter group in the Baseline listing, as applicable. The sum of these amounts of reclaimed water and the calculated large meter usage increase is the total amount of unbilled water under the Performance Guarantee.

Exhibit C – Performance Assurance
City of Jackson, MS

The following table shows the estimated efficiencies of the Baseline meters as used in the calculations for this FIM.

Table 5.7 Estimation of Existing Small Meter Accuracy over Project Term

Description	Existing Small Meter Accuracy - Test Data							
	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Water - 5/8" Inside Group 1	87.10%	87.10%	86.60%	86.10%	85.60%	85.10%	84.60%	84.10%
Water - 5/8" Inside Group 2	87.10%	87.10%	86.60%	86.10%	85.60%	85.10%	84.60%	84.10%
Water - 5/8" Inside Group 3	87.10%	87.10%	86.60%	86.10%	85.60%	85.10%	84.60%	84.10%
Water - 5/8" Inside Group 4	87.10%	87.10%	86.60%	86.10%	85.60%	85.10%	84.60%	84.10%
Water - 5/8" Inside 1 Mile	87.10%	87.10%	86.60%	86.10%	85.60%	85.10%	84.60%	84.10%
Water - 5/8" Outside 1 Mile	87.10%	87.10%	86.60%	86.10%	85.60%	85.10%	84.60%	84.10%
Water - 1" Inside	93.40%	93.40%	92.90%	92.40%	91.90%	91.40%	90.90%	90.40%
Water - 1" Inside 1 Mile	93.40%	93.40%	92.90%	92.40%	91.90%	91.40%	90.90%	90.40%
Water - 1" Outside 1 Mile	93.40%	93.40%	92.90%	92.40%	91.90%	91.40%	90.90%	90.40%
Water - 1.5" & 2" Inside	94.70%	94.70%	94.20%	93.70%	93.20%	92.70%	92.20%	91.70%
Water - 1.5" & 2" Inside 1 Mile	94.70%	94.70%	94.20%	93.70%	93.20%	92.70%	92.20%	91.70%
Water - 1.5" & 2" Outside 1 Mile	94.70%	94.70%	94.20%	93.70%	93.20%	92.70%	92.20%	91.70%
Sewer - 5/8" Inside Group 1	87.10%	87.10%	86.60%	86.10%	85.60%	85.10%	84.60%	84.10%
Sewer - 5/8" Inside Group 2	87.10%	87.10%	86.60%	86.10%	85.60%	85.10%	84.60%	84.10%
Sewer - 5/8" Inside Group 3	87.10%	87.10%	86.60%	86.10%	85.60%	85.10%	84.60%	84.10%
Sewer - 5/8" Inside Group 4	87.10%	87.10%	86.60%	86.10%	85.60%	85.10%	84.60%	84.10%
Sewer - 5/8" Inside 1 Mile	87.10%	87.10%	86.60%	86.10%	85.60%	85.10%	84.60%	84.10%
Sewer - 5/8" Outside 1 Mile	87.10%	87.10%	86.60%	86.10%	85.60%	85.10%	84.60%	84.10%
Sewer - 1" Inside	93.40%	93.40%	92.90%	92.40%	91.90%	91.40%	90.90%	90.40%
Sewer - 1" Inside 1 Mile	93.40%	93.40%	92.90%	92.40%	91.90%	91.40%	90.90%	90.40%
Sewer - 1" Outside 1 Mile	93.40%	93.40%	92.90%	92.40%	91.90%	91.40%	90.90%	90.40%
Sewer - 1.5" & 2" Inside	94.70%	94.70%	94.20%	93.70%	93.20%	92.70%	92.20%	91.70%
Sewer - 1.5" & 2" Inside 1 Mile	94.70%	94.70%	94.20%	93.70%	93.20%	92.70%	92.20%	91.70%
Sewer - 1.5" & 2" Outside 1 Mile	94.70%	94.70%	94.20%	93.70%	93.20%	92.70%	92.20%	91.70%

Exhibit C – Performance Assurance
City of Jackson, MS

Table 5.7 Estimated Existing Small Meter Accuracy over Project Term (continued)

Description	Existing Small Meter Accuracy - Test Data							
	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
Water - 5/8" Inside Group 1	83.60%	83.10%	82.60%	82.10%	81.60%	81.10%	80.60%	80.10%
Water - 5/8" Inside Group 2	83.60%	83.10%	82.60%	82.10%	81.60%	81.10%	80.60%	80.10%
Water - 5/8" Inside Group 3	83.60%	83.10%	82.60%	82.10%	81.60%	81.10%	80.60%	80.10%
Water - 5/8" Inside Group 4	83.60%	83.10%	82.60%	82.10%	81.60%	81.10%	80.60%	80.10%
Water - 5/8" Inside 1 Mile	83.60%	83.10%	82.60%	82.10%	81.60%	81.10%	80.60%	80.10%
Water - 5/8" Outside 1 Mile	83.60%	83.10%	82.60%	82.10%	81.60%	81.10%	80.60%	80.10%
Water - 1" Inside	89.90%	89.40%	88.90%	88.40%	87.90%	87.40%	86.90%	86.40%
Water - 1" Inside 1 Mile	89.90%	89.40%	88.90%	88.40%	87.90%	87.40%	86.90%	86.40%
Water - 1" Outside 1 Mile	89.90%	89.40%	88.90%	88.40%	87.90%	87.40%	86.90%	86.40%
Water - 1.5" & 2" Inside	91.20%	90.70%	90.20%	89.70%	89.20%	88.70%	88.20%	87.70%
Water - 1.5" & 2" Inside 1 Mile	91.20%	90.70%	90.20%	89.70%	89.20%	88.70%	88.20%	87.70%
Water - 1.5" & 2" Outside 1 Mile	91.20%	90.70%	90.20%	89.70%	89.20%	88.70%	88.20%	87.70%
Sewer - 5/8" Inside Group 1	83.60%	83.10%	82.60%	82.10%	81.60%	81.10%	80.60%	80.10%
Sewer - 5/8" Inside Group 2	83.60%	83.10%	82.60%	82.10%	81.60%	81.10%	80.60%	80.10%
Sewer - 5/8" Inside Group 3	83.60%	83.10%	82.60%	82.10%	81.60%	81.10%	80.60%	80.10%
Sewer - 5/8" Inside Group 4	83.60%	83.10%	82.60%	82.10%	81.60%	81.10%	80.60%	80.10%
Sewer - 5/8" Inside 1 Mile	83.60%	83.10%	82.60%	82.10%	81.60%	81.10%	80.60%	80.10%
Sewer - 5/8" Outside 1 Mile	83.60%	83.10%	82.60%	82.10%	81.60%	81.10%	80.60%	80.10%
Sewer - 1" Inside	89.90%	89.40%	88.90%	88.40%	87.90%	87.40%	86.90%	86.40%
Sewer - 1" Inside 1 Mile	89.90%	89.40%	88.90%	88.40%	87.90%	87.40%	86.90%	86.40%
Sewer - 1" Outside 1 Mile	89.90%	89.40%	88.90%	88.40%	87.90%	87.40%	86.90%	86.40%
Sewer - 1.5" & 2" Inside	91.20%	90.70%	90.20%	89.70%	89.20%	88.70%	88.20%	87.70%
Sewer - 1.5" & 2" Inside 1 Mile	91.20%	90.70%	90.20%	89.70%	89.20%	88.70%	88.20%	87.70%
Sewer - 1.5" & 2" Outside 1 Mile	91.20%	90.70%	90.20%	89.70%	89.20%	88.70%	88.20%	87.70%

- 5.8 Applicable codes - Federal, State (Provincial), County or Municipal codes or regulations are applicable to the use and operation of the Facility. SIEMENS will maintain the current level of Facility compliance relative to applicable codes. Unless specifically set forth in the Scope of Work and Services, Exhibit A, nothing herein should be construed to require SIEMENS to provide additional work or services in the event that the current applicable code or regulation is modified.

Exhibit C – Performance Assurance
City of Jackson, MS

Article 6: Utility Rate Structures and Escalation Rates

- 6.1 The Total Guaranteed Savings reflected in Table 1.2 above represent the predicted small meter billable usage increase that can be extrapolated from the unbilled water that the new meters will track (as detailed in Table 1.1) when the unbilled water is converted to a dollar figure based on the formulas herein. Table 1.1 is provided to show the total system benefits on an annual basis for the term of the Agreement. Table 6.1 was generated to show the rate structures used in the calculations of the Small Meter Billable Usage Increase for the Performance Guarantee Period.

Table 6.1 Small Meter Water Rate Structure during Performance Guarantee Period

Description	Baseline	Rate Structures in \$/CCF						
		Annual Period 1	Annual Period 2	Annual Period 3	Annual Period 4	Annual Period 5	Annual Period 6	Annual Period 7
Water - 5/8" Inside Group 1	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48
Water - 5/8" Inside Group 2	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48
Water - 5/8" Inside Group 3	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48
Water - 5/8" Inside Group 4	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48
Water - 5/8" Inside 1 Mile	\$4.96	\$4.96	\$4.96	\$4.96	\$4.96	\$4.96	\$4.96	\$4.96
Water - 5/8" Outside 1 Mile	\$1.48	\$1.48	\$1.48	\$1.48	\$1.48	\$1.48	\$1.48	\$1.48
Water - 1" Inside	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48
Water - 1" Inside 1 Mile	\$4.96	\$4.96	\$4.96	\$4.96	\$4.96	\$4.96	\$4.96	\$4.96
Water - 1" Outside 1 Mile	\$1.48	\$1.48	\$1.48	\$1.48	\$1.48	\$1.48	\$1.48	\$1.48
Water - 1.5" & 2" Inside	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48
Water - 1.5" & 2" Inside 1 Mile	\$4.96	\$4.96	\$4.96	\$4.96	\$4.96	\$4.96	\$4.96	\$4.96
Water - 1.5" & 2" Outside 1 Mile	\$1.48	\$1.48	\$1.48	\$1.48	\$1.48	\$1.48	\$1.48	\$1.48
Sewer - 5/8" Inside Group 1	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15
Sewer - 5/8" Inside Group 2	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15
Sewer - 5/8" Inside Group 3	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15
Sewer - 5/8" Inside Group 4	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15
Sewer - 5/8" Inside 1 Mile	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15
Sewer - 5/8" Outside 1 Mile	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15
Sewer - 1" Inside	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15
Sewer - 1" Inside 1 Mile	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15
Sewer - 1" Outside 1 Mile	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15
Sewer - 1.5" & 2" Inside	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15
Sewer - 1.5" & 2" Inside 1 Mile	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15
Sewer - 1.5" & 2" Outside 1 Mile	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15

Exhibit C – Performance Assurance
City of Jackson, MS

Table 6.1 Small Meter Water Rate Structure during Performance Guarantee Period
(continued)

Description	Rate Structures in \$/CCF							
	Annual Period 8	Annual Period 9	Annual Period 10	Annual Period 11	Annual Period 12	Annual Period 13	Annual Period 14	Annual Period 15
Water - 5/8" Inside Group 1	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48
Water - 5/8" Inside Group 2	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48
Water - 5/8" Inside Group 3	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48
Water - 5/8" Inside Group 4	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48
Water - 5/8" Inside 1 Mile	\$4.96	\$4.96	\$4.96	\$4.96	\$4.96	\$4.96	\$4.96	\$4.96
Water - 5/8" Outside 1 Mile	\$1.48	\$1.48	\$1.48	\$1.48	\$1.48	\$1.48	\$1.48	\$1.48
Water - 1" Inside	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48
Water - 1" Inside 1 Mile	\$4.96	\$4.96	\$4.96	\$4.96	\$4.96	\$4.96	\$4.96	\$4.96
Water - 1" Outside 1 Mile	\$1.48	\$1.48	\$1.48	\$1.48	\$1.48	\$1.48	\$1.48	\$1.48
Water - 1.5" & 2" Inside	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48	\$2.48
Water - 1.5" & 2" Inside 1 Mile	\$4.96	\$4.96	\$4.96	\$4.96	\$4.96	\$4.96	\$4.96	\$4.96
Water - 1.5" & 2" Outside 1 Mile	\$1.48	\$1.48	\$1.48	\$1.48	\$1.48	\$1.48	\$1.48	\$1.48
Sewer - 5/8" Inside Group 1	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15
Sewer - 5/8" Inside Group 2	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15
Sewer - 5/8" Inside Group 3	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15
Sewer - 5/8" Inside Group 4	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15
Sewer - 5/8" Inside 1 Mile	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15
Sewer - 5/8" Outside 1 Mile	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15
Sewer - 1" Inside	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15
Sewer - 1" Inside 1 Mile	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15
Sewer - 1" Outside 1 Mile	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15
Sewer - 1.5" & 2" Inside	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15
Sewer - 1.5" & 2" Inside 1 Mile	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15
Sewer - 1.5" & 2" Outside 1 Mile	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15	\$2.15

Exhibit C – Performance Assurance
City of Jackson, MS

Article 7: Contracted Baseline Data

7.1 The following criteria detail the Facility operating parameters that are required to be implemented on the Guarantee Date or on such time as agreed upon by the Parties. The failure of the CLIENT to maintain the following Facility operating parameters, which is the Contracted Baseline, may result in a Material Change which may require a modification of the Performance Guarantee pursuant to Article 4 of the Agreement.

- (a) Water distribution integrity at or above Baseline maintenance levels, where Baseline maintenance levels are understood as meaning the maintenance levels that existed during the Baseline Period, January 2011 through December 2011;
- (b) New meters installed by the CLIENT after Substantial Completion of the Work are to be compatible with the new system and the manufacturer's specifications as described in Exhibit A.

7.2 Meter testing will be performed on a representative sampling of small meters to provide the post-measurement system average level of accuracy for all small meters. Based on AWWA guidelines for meter sampling, a random sample of the meters will be selected, removed from service, and delivered to a third-party testing facility. The accuracy tests will be based on AWWA standards for testing residential water meters per AWWA Manual M6. For a true test of a water meter at all flow rates, AWWA standards recommend first testing low, medium, and high flow rates and then calculating the aggregate meter efficiency by weighted formula. The three test points (High, Med, and Low flow) are weighted 15%, 70%, and 15%. The formula for meter accuracy is as follow:

$$\begin{aligned} & (15\% \times \text{Measured Efficiency @ High flow}) \\ & + (70\% \times \text{Measured Efficiency @ Medium flow}) \\ & + (15\% \times \text{Measured Efficiency @ Low flow}) \\ & \text{Average Weighted Efficiency of the Meter*} \end{aligned}$$

(*reference: AWWA Meter Manual M6, Fourth Edition; pg 60, "Meter Testing")

Table 7.2 shows the estimated efficiencies of the small water meters throughout the Performance Guarantee Period.

Exhibit C – Performance Assurance
City of Jackson, MS

Table 7.2 Guaranteed Small Meter Accuracy during Performance Guarantee Period

Description	Small Meter Accuracy - Guaranteed Values							
	Baseline	Annual Period 1	Annual Period 2	Annual Period 3	Annual Period 4	Annual Period 5	Annual Period 6	Annual Period 7
Water - 5/8" Inside Group 1	98.50%	98.50%	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%
Water - 5/8" Inside Group 2	98.50%	98.50%	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%
Water - 5/8" Inside Group 3	98.50%	98.50%	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%
Water - 5/8" Inside Group 4	98.50%	98.50%	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%
Water - 5/8" Inside 1 Mile	98.50%	98.50%	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%
Water - 5/8" Outside 1 Mile	98.50%	98.50%	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%
Water - 1" Inside	98.50%	98.50%	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%
Water - 1" Inside 1 Mile	98.50%	98.50%	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%
Water - 1" Outside 1 Mile	98.50%	98.50%	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%
Water - 1.5" & 2" Inside	98.50%	98.50%	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%
Water - 1.5" & 2" Inside 1 Mile	98.50%	98.50%	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%
Water - 1.5" & 2" Outside 1 Mile	98.50%	98.50%	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%
Sewer - 5/8" Inside Group 1	98.50%	98.50%	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%
Sewer - 5/8" Inside Group 2	98.50%	98.50%	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%
Sewer - 5/8" Inside Group 3	98.50%	98.50%	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%
Sewer - 5/8" Inside Group 4	98.50%	98.50%	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%
Sewer - 5/8" Inside 1 Mile	98.50%	98.50%	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%
Sewer - 5/8" Outside 1 Mile	98.50%	98.50%	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%
Sewer - 1" Inside	98.50%	98.50%	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%
Sewer - 1" Inside 1 Mile	98.50%	98.50%	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%
Sewer - 1" Outside 1 Mile	98.50%	98.50%	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%
Sewer - 1.5" & 2" Inside	98.50%	98.50%	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%
Sewer - 1.5" & 2" Inside 1 Mile	98.50%	98.50%	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%
Sewer - 1.5" & 2" Outside 1 Mile	98.50%	98.50%	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%

Exhibit C – Performance Assurance
City of Jackson, MS

Table 7.2 Guaranteed Small Meter Accuracy during Performance Guarantee Period
(continued)

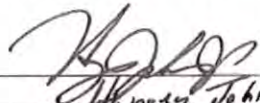
Description	Small Meter Accuracy - Guaranteed Values							
	Annual Period 8	Annual Period 9	Annual Period 10	Annual Period 11	Annual Period 12	Annual Period 13	Annual Period 14	Annual Period 15
Water - 5/8" Inside Group 1	97.00%	96.50%	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%
Water - 5/8" Inside Group 2	97.00%	96.50%	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%
Water - 5/8" Inside Group 3	97.00%	96.50%	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%
Water - 5/8" Inside Group 4	97.00%	96.50%	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%
Water - 5/8" Inside 1 Mile	97.00%	96.50%	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%
Water - 5/8" Outside 1 Mile	97.00%	96.50%	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%
Water - 1" Inside	97.00%	96.50%	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%
Water - 1" Inside 1 Mile	97.00%	96.50%	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%
Water - 1" Outside 1 Mile	97.00%	96.50%	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%
Water - 1.5" & 2" Inside	97.00%	96.50%	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%
Water - 1.5" & 2" Inside 1 Mile	97.00%	96.50%	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%
Water - 1.5" & 2" Outside 1 Mile	97.00%	96.50%	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%
Sewer - 5/8" Inside Group 1	97.00%	96.50%	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%
Sewer - 5/8" Inside Group 2	97.00%	96.50%	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%
Sewer - 5/8" Inside Group 3	97.00%	96.50%	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%
Sewer - 5/8" Inside Group 4	97.00%	96.50%	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%
Sewer - 5/8" Inside 1 Mile	97.00%	96.50%	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%
Sewer - 5/8" Outside 1 Mile	97.00%	96.50%	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%
Sewer - 1" Inside	97.00%	96.50%	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%
Sewer - 1" Inside 1 Mile	97.00%	96.50%	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%
Sewer - 1" Outside 1 Mile	97.00%	96.50%	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%
Sewer - 1.5" & 2" Inside	97.00%	96.50%	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%
Sewer - 1.5" & 2" Inside 1 Mile	97.00%	96.50%	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%
Sewer - 1.5" & 2" Outside 1 Mile	97.00%	96.50%	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%


Exhibit C – Performance Assurance
City of Jackson, MS

This Exhibit C, comprised of 18 pages, is attached to and made a part of the Agreement between SIEMENS and the CLIENT. BY SIGNING BELOW, THE PARTIES CONFIRM THAT THEY HAVE REVIEWED THE INCLUDED MEASUREMENT AND VERIFICATION OPTIONS AND THEIR APPLICATION TO BE USED IN CALCULATING SAVINGS UNDER THE AGREEMENT.

CLIENT: City of Jackson, MS

SIEMENS: Siemens Industry, Inc.

Signature: 
Printed Name: Anthony Johnson, Jr.
Title: Mayor
Date: 12/28/12

Signature: 
Printed Name: M. Ressler
Title: President
Date: 1/30/13


M. Ressler

**AMENDMENT NO. 1 TO
PERFORMANCE CONTRACTING AGREEMENT
BETWEEN**

CITY OF JACKSON, MISSISSIPPI

AND

**SIEMENS INDUSTRY, INC.,
BUILDING TECHNOLOGIES DIVISION**

WITNESSETH:

WHEREAS, the City of Jackson (hereinafter "CLIENT") and Siemens Industry, Inc, Building Technologies Division (hereinafter "SIEMENS") entered into a Performance Contracting Agreement for City of Jackson, MS, Water Infrastructure Improvements on January 30, 2013; and

WHEREAS, the parties desire to make certain revisions to the original Agreement that will better enable the CLIENT to finance the Price of the Agreement.

WHEREFORE, that for and in consideration for the mutual benefits and advantages each to the other, as herein after set forth, the parties agree to amend the Agreement as follows:

Article 1, Agreement is amended as follows:

THIS **PERFORMANCE CONTRACTING AGREEMENT** ("Agreement") is made this 30th day of January, 2013, by and between Siemens Industry, Inc., Building Technologies Division ("SIEMENS") and the party identified below as the CLIENT....

Article 2, Glossary, is amended as follows:

...

"Construction Period" means the period between the Effective Contract Date and the first day of the month following the date of Substantial Completion, and for this Project, shall also be Annual Period 0 of the Performance Guarantee Period....

"Effective Contract Date" is the date CLIENT issues to SIEMENS a written notice-to-proceed with the Work, after confirming receipt of funding for the Project...

"Performance Guarantee Period" means the timeframe described in Tables 1.1 and 1.2 of the Performance Assurance, Exhibit C, or until the termination of this Agreement, whichever occurs earlier....

Article 4, Performance Guarantee, is amended as follows:

...

4.6 (a) Within ninety (90) days of the Guarantee Date, the Savings from Annual Period 0 shall be reconciled and reported to the CLIENT....

Article 7, Changes and Delays, is amended as follows:

...
 7.4 SIEMENS shall not be responsible for loss, delay, injury, damage or failure of performance that may be caused by circumstances beyond its control, including but not restricted to acts or omissions by the CLIENT or its employees, agents or contractors, Acts of God, war, civil commotion, acts or omissions of government authorities, fire, theft, corrosion, flood, water damage, lightning, freeze-ups, strikes, lockouts, differences with non-SIEMENS workmen, riots, explosions, quarantine restrictions, or shortage of vehicles, fuel, labor or materials as is typical with a natural disaster or other significant regional event beyond SIEMENS' control. In the event of such delay or failure, the time for performance shall be extended by a period equal to the time lost plus a reasonable recovery period, and if the delay is caused by CLIENT, the compensation shall be equitably adjusted to compensate for additional costs SIEMENS incurs due to such delay. If any such delay exceeds sixty (60) days, SIEMENS may terminate this Agreement upon three (3) days notice to the CLIENT and the CLIENT shall promptly pay SIEMENS for the allocable portion of the Work completed, and if the delay is caused by CLIENT, for any costs and expenses of termination....

Article 9, Acceptance, is amended as follows:

...
 9.3 Any disputes concerning the determination that the Work is Substantially Complete and the amount of liquidated damages, if any, will be resolved by submitting the issue within seven (7) business days to a third party professional engineering firm which is reasonably acceptable to both SIEMENS and the CLIENT. The determination of this firm with respect to completion or Substantial Completion will be non-binding upon the Parties, and will not affect the warranties for the Work and Services, or absolve SIEMENS of any liability it may have for any latent, hidden or otherwise undetectable defects that may exist in the Work and Services at Substantial Completion. In resolving any such dispute, the third-party professional engineering firm shall also allocate liability for payment of its fee between the Parties, after taking into consideration the merits of each party's position.

9.4 Liquidated Damages ("LDs"). If it is determined that the Work was not Substantially Complete within 910 days of the Effective Contract Date, SIEMENS shall pay to CLIENT LDs equal to: \$1,489,899 plus \$19,700.11 per day delayed after Day 910.

SIEMENS shall be entitled to reduce the amount of LDs by the amount of Savings actually received from the small meters, large meters, operational savings, and deferred maintenance during the Construction Period. SIEMENS will be entitled to prove such Savings in any reasonable manner, including the right to offset for deficiencies in the CLIENT'S pursuit of such Savings.

LDs under this section shall apply only to delay in Substantial Completion directly attributable to SIEMENS, its agents, representatives, employees, and/or subcontractors, and not to delay in Substantial Completion caused by CLIENT, third-parties, and/or circumstances beyond SIEMENS control, including but not limited to those force majeure events described in Section 7.4. Notwithstanding the foregoing, the Guarantee Date shall remain the first day of the next month following actual Substantial Completion of the Project, and Annual Period 1 shall not include any shortfall related to LDs, if any.

To illustrate: If Substantial Completion of the Project was scheduled for April 20, but did not occur until May 5 due to a delay caused by SIEMENS, the formula for LDs would be: $(1,489,899 + (15 \times$

19,700.11)) – (Savings actually realized through May 5). If the result is positive, SIEMENS would pay such LDs to CLIENT; if negative, then no LDs would be due. Finally, in this scenario, the Guarantee Date would be June 1 (rather than May 1, as originally projected) and would mark the commencement of Annual Period 1 of the Performance Guarantee Period.

Exhibit A, Article 1: Scope of Work is amended as follows:

...

1.2.3 SIEMENS agrees to make good faith efforts toward meeting the goals of the CLIENT'S "Jobs for Jacksonians" program, which is committed to cultivating and ensuring the quality of life of its citizens, through various programs, employment, initiatives, and assistance. SIEMENS will assist the CLIENT in achieving its goal by strongly considering City residents for employment opportunities. SIEMENS anticipates this Project creating up to 645 direct jobs and 400 indirect jobs....

Exhibit A, Article 2: Work Implementation Period is amended as follows:

2.1 Commencement of Work: SIEMENS shall commence the Work on the Effective Contract Date, shall perform the Work diligently, and shall complete the Work no later than 910 calendar days from the day of commencement.

Exhibit A, Article 3: Scope of Services-Performance Assurance Services Program (PASP) is amended as follows:

3.1 PASP Services shall commence during the Construction Period unless terminated by CLIENT in accordance with Article 4 of the Agreement....

3.5 A Construction Period Savings report and reconciliation for Annual Period 0 will be provided to CLIENT within ninety (90) calendar days of Substantial Completion, provided CLIENT has executed the PASP agreement and has paid the PASP Service fee defined in Exhibit B, Article 2.

3.6 Except for the report for Annual Period 0, the Annual Performance Assurance Report will be provided within ninety (90) calendar days of the annual anniversary of the Guarantee Date.

Exhibit B, Article 1: Payment of Scope of Work is amended as follows:

...

1.2 Escrow: The CLIENT has agreed to deposit the Price into an Escrow Account at a financial institution satisfactory to both the CLIENT and SIEMENS. All expenses to establish the Escrow Account shall be the complete responsibility of the CLIENT and the CLIENT will receive all interest earnings from the Escrow Account. SIEMENS will submit periodic invoices to the CLIENT based on the Payment Schedule in Table B.1. The CLIENT shall be responsible for submitting the necessary documents to the Escrow Agent to allow for timely disbursements from the Escrow Account. The funding of the Escrow Account in an amount equal to or greater than the Price stated in Article 1.1 above shall be a condition precedent to SIEMENS obligation to perform or to continue the performance of the Work. If the Escrow Account is not funded within 90 days of the execution of this Agreement, this Agreement may be terminated by either party with seven (7) calendar days advance written notice. This 90 day funding period may be extended as mutually agreed in writing by the Parties. In the event that the Agreement is terminated as described in this paragraph and CLIENT has previously authorized SIEMENS to proceed with the Work, the CLIENT shall be obligated to reimburse SIEMENS either: (i) for the Work performed to date; or (ii) for the Work specifically authorized by the CLIENT....

Exhibit B, Table B.2—PASP Payment Schedule is amended as follows:

Table B.2 – PASP Payment Schedule		
Annual Period	Annual Payments (\$)	Notes
0	0	No PASP Fee due
1	242,000	Paid Quarterly in Arrears
2	249,260	Paid Quarterly in Arrears
3	256,738	Paid Quarterly in Arrears
4	264,440	Paid Quarterly in Arrears
5	272,373	Paid Quarterly in Arrears
6	280,544	Paid Quarterly in Arrears
7	288,961	Paid Quarterly in Arrears
8	297,629	Paid Quarterly in Arrears
9	306,558	Paid Quarterly in Arrears
10	315,755	Paid Quarterly in Arrears
11	325,228	Paid Quarterly in Arrears
12	334,985	Paid Quarterly in Arrears
13	345,034	Paid Quarterly in Arrears
14	355,385	Paid Quarterly in Arrears
15	366,047	Paid Quarterly in Arrears

Exhibit C, Article 1: Summary of Articles and Total Guaranteed Savings, Table 1.1—Total Guaranteed Savings (Units) is amended as follows:

Table 1.1 – Total Guaranteed Savings (Units)			
Performance Period	Small Meter Billable Usage Increase [1] (CCF)	Large Meter Billable Usage Increase [2] (CCF)	TOTAL
Annual Period 0	199,925	217,376	417,301
Annual Period 1	999,624	434,751	1,434,375
Annual Period 2	1,054,967	434,751	1,489,718
Annual Period 3	1,110,311	434,751	1,545,062
Annual Period 4	1,165,654	434,751	1,600,405
Annual Period 5	1,220,998	434,751	1,655,749
Annual Period 6	1,220,998	434,751	1,655,749
Annual Period 7	1,220,998	434,751	1,655,749
Annual Period 8	1,220,998	434,751	1,655,749
Annual Period 9	1,220,998	434,751	1,655,749
Annual Period 10	1,220,998	434,751	1,655,749
Annual Period 11	1,220,998	434,751	1,655,749
Annual Period 12	1,220,998	434,751	1,655,749
Annual Period 13	1,220,998	434,751	1,655,749
Annual Period 14	1,220,998	434,751	1,655,749
Annual Period 15	1,220,998	434,751	1,655,749
TOTAL	17,961,459	6,738,641	24,700,100

[1] "**Small Meter Billable Usage Increase**" means the additional hundred cubic feet or dollars that are generated by the installation of water meters two inches and smaller as a portion of the Automatic Metering System Upgrade FIM. This value is calculated by using the Baseline consumption for the applicable meter population, the existing utility rates, and the existing and proposed meter accuracies as described in this Performance Assurance, Exhibit C....

[2] "**Large Meter Billable Usage Increase**" means the additional hundred cubic feet or dollars that are generated by the installation of water meters larger than two inches as a portion of the Automatic Metering System Upgrade FIM. This value is stipulated to occur for each Annual Period of the Performance Guarantee Period.

Exhibit C, Article 1: Summary of Articles and Total Guaranteed Savings, Table 1.2—Total Guaranteed Savings (Cost) is amended as follows:

Table 1.2 – Total Guaranteed Savings (Cost)					
Performance Period	Small Meter Billable Usage Increase \$	Large Meter Billable Usage Increase \$	Operational Savings \$	Deferred Maintenance Savings \$	Total Savings \$
Annual Period 0	\$484,347	\$501,802	\$503,750	-	\$1,489,899
Annual Period 1	\$2,421,737	\$1,003,604	\$2,015,200	\$1,750,000	\$7,190,541
Annual Period 2	\$2,555,055	\$1,003,604	\$2,075,656	\$1,750,000	\$7,384,315
Annual Period 3	\$2,688,373	\$1,003,604	\$2,137,926	\$1,750,000	\$7,579,903
Annual Period 4	\$2,821,691	\$1,003,604	\$2,202,063	\$1,750,000	\$7,777,358
Annual Period 5	\$2,955,010	\$1,003,604	\$2,268,125	\$1,750,000	\$7,976,739
Annual Period 6	\$2,955,010	\$1,003,604	\$2,336,169	\$1,750,000	\$8,044,783
Annual Period 7	\$2,955,010	\$1,003,604	\$2,406,254	\$1,750,000	\$8,114,868
Annual Period 8	\$2,955,010	\$1,003,604	\$2,478,442	\$1,750,000	\$8,187,056
Annual Period 9	\$2,955,010	\$1,003,604	\$2,552,795	\$1,750,000	\$8,261,409
Annual Period 10	\$2,955,010	\$1,003,604	\$2,629,379	\$1,750,000	\$8,337,993
Annual Period 11	\$2,955,010	\$1,003,604	\$2,708,260	\$1,750,000	\$8,416,874
Annual Period 12	\$2,955,010	\$1,003,604	\$2,789,508	\$1,750,000	\$8,498,122
Annual Period 13	\$2,955,010	\$1,003,604	\$2,873,193	\$1,750,000	\$8,581,807
Annual Period 14	\$2,955,010	\$1,003,604	\$2,959,389	\$1,750,000	\$8,668,003
Annual Period 15	\$2,955,010	\$1,003,604	\$3,048,171	\$1,750,000	\$8,756,785
TOTALS	\$43,476,313	\$15,555,862	\$37,984,280	\$26,250,000	\$123,266,455

Exhibit C, Article 2: Measurement and Verification Options, Table 2.2—Source of Operational Savings is amended as follows:

Table 2.2 - Source of Operational Savings				
Account/Vendor	Description	Annual Cost \$	# of Annual Periods Savings Are Applied	Annual Period Savings Begin
Manpower	Avoided future employment needs through elimination of new employee requisitions	\$476,000	15	1
Reduction In City Vehicles	Fewer vehicles needed for meter reading	\$46,200	15	1
Reduction in Fuel Consumption	Less fuel consumed for meter reading	\$33,000	15	1
Manpower	Fewer re-reads and less work associated with meter reading	\$400,000	15	1
Meter/Lid Purchases	Less replacement meter/lid purchase requirements	\$240,000	15	1
Manpower	Less work associated with shutoffs/restore of service	\$800,000	15	1
Billing System Maintenance	Elimination of existing billing system maintenance expenditures	\$20,000	15	1
Construction Savings	Portion of the above items that will be achieved during the Construction Period	\$503,750	1	0
O&M Maintenance*	Avoided Deferred Maintenance costs associated with Water Treatment Plants and the City Sewer Collection System	\$1,750,000	15	1

* O&M Maintenance savings are associated with Deferred Maintenance and are applied with NO ANNUAL OPERATIONAL SAVINGS ESCALATION. These repairs are due to the aging equipment

currently in place and are included in the existing and future budgets of the City. These costs include the material cost, the installation cost, and financing costs associated with the repairs....

All other provisions of the Agreement not specifically amended herein shall remain in full force and effect.

IN WITNESS THEREOF, this Amendment No.1 has been duly executed by the Parties, this 22d day of February, 2013.

Agreed for City of Jackson, Mississippi

(Signature) by: [Signature]

Harvey Johnson, Jr., Mayor

City Clerk Attest:

[Signature]

Agreed for Siemens Industry, Inc.

(Signature) by: [Signature]

Print Name and Title:

PREIDENT M. RENDELLI

(Signature) by: [Signature]

Print Name and Title:

UPFBA, Mark Evans

approved by legal
[Signature]
molly m. folcy

**AMENDMENT NO. 2 TO
PERFORMANCE CONTRACTING AGREEMENT
BETWEEN**

CITY OF JACKSON, MISSISSIPPI

AND

**SIEMENS INDUSTRY, INC.,
BUILDING TECHNOLOGIES DIVISION**

WITNESSETH:

WHEREAS, the City of Jackson (hereinafter "CLIENT") and Siemens Industry, Inc, Building Technologies Division (hereinafter "SIEMENS") entered into a Performance Contracting Agreement for City of Jackson, MS, Water Infrastructure Improvements on January 30, 2013, and a subsequent Amendment No. 1 dated February 22, 2013 (collectively, the "Agreement"); and

WHEREAS, the Parties desire to revise the scope of work of the Agreement.

NOW THEREFORE, as a result of the Recitals, which are specifically incorporated herein and for the other good and valuable consideration, the Parties agree to amend the Agreement as follows:

Exhibit A, Article 1, Section 1.2.2 is revised as follows:

1.2.2 WTP and Sewer Collection Line Repairs - Except as otherwise expressly provided herein, SIEMENS will provide all Equipment, material and labor to perform the following:

SIEMENS will provide parts, repairs, and upgrades to the J.H. Fewell Water Treatment Plant (WTP) as follows:

- ~~Provide a one (1)-year inventory of ultraviolet reactor system parts and supplies per the table below:~~

Description	Qty
Lamp	56
Sleeve, Quartz	12
Sleeve, Sensor	5
O-ring, Outer Access Port	56
O-ring, Sleeve Sealing	56
O-ring, Sensor Sleeve	56
Wiper Assembly	8
Wiper Seal Kit	64
Wiper Seal	16
Wiper, Sensor Sleeve	32
Washer, D-Style	4
Screw, 10-24 x 3/8 Shoulder	4
Screw—4 40 x 3/8 Phillips, Diaphragm	4
Wiper Drive Screw Assembly	1
Motor Assembly, with Mount 90 VDC	1
Coupling Kit, Drive	1

Description	Qty
Seal Rod, Wiper Yoke	4
Wiper Assembly Sensor, Teflon	4
Seal, Wiper Sensor Sleeve	4
DC Drive, Wiper Motor	4
Magnet Assembly, Homing	1
Reed Assembly, Housing	1
Sensor Assembly, Double	1
Level Sensor	1
Relay, Mercury 100A	3
Cap 1.4mF 3000V	4
Cap 1.75mF 3000V	2
Relay, Ground Fault Digital	1
Ballast (Electromagnetic)	1
Fan, 114VCE 0.24A (6" x 6")	1
Fan Filter (5-Pack)	2
Fan, Gasket Seal (5-Pack)	2

Revelation Proximity Sensor	4
Reed Assembly, Homing 12-24 Sensor	2
Reed Assembly, Homing Sensor	4
Magnet Assembly, Homing	2
Wiper Lead Nut	2
O-ring, Wiper Yoke	4

Cleaner, Acti-Clean gel solution	13
Lamp, UVT	3
Ballast, UVT	4
Board, Driver Bipolar Stepper	4
Linear Motor Assembly	4
100% UVT Solution (1 Gallon)	4

- Chemical Feed Repairs
 - Inspection and replacement of existing motor, switchover valve, ammoniators, chlorinators, chlorine injector, chemical feed pumps, CL2 analyzers and associated piping;
 - Provide up to six (6) on-site visits (not to exceed 8 hours each) to calibrate and adjust the system to ensure proper operation;
- Provide quarterly service/maintenance labor for twenty-four (24) months during the Construction Period for Trojan ultraviolet system as follows:
 - Forty (40) hours on-site per quarterly visit to perform inspection and service of the system;
 - Thirty-two (32) hours of emergency service with 48-hour response time.
 - 24/7 telephone technical support;
- ~~Cap existing water wells at Rainey Road, Forest Hills, Cedar Hills, and Presidential Hills as follows:~~
 - ~~Remove the pump and column from the well;~~
 - ~~Install minimum two-inch (2") tubing to the bottom of the well and cement to the surface;~~
 - ~~Remove concrete base and cut the casing three feet (3') below ground level;~~
 - ~~Grade the top surface area of the well and contour to match the existing location;~~
 - ~~Submit abandonment report to the Mississippi Department of Environmental Quality (MDEQ);~~
- Provide up to twenty-four months of service during the Construction Period for the Controls Systems, Inc. controls system as follows:
 - Limited to 400 total hours per year between the hours of 7:00 AM to 4:30 PM CST, Monday thru Friday;
 - Two (2) hour response time during the hours defined above;
 - Minimum charge of one (1) hour per service call;
- ~~Drain and inspect existing clearwells in order to generate a detailed report of the existing condition;~~
- ~~Inspect and clean existing elevated water storage tanks located at Springridge, Forest, Livingston, Lynch, Riverside, and Suncrest.~~
- Recoat Elaine water storage tank as follows:
 - Remove existing coatings;
 - Apply one (1) coat of zinc clad coating;
 - Apply one (1) coat of protective epoxy coating;
 - Apply one (1) coat of high gloss, polyurethane sealer;
 - Application of CLIENT's logo is included;
 - **Exclusion:** No tank repairs are included.
- Replace Clearwell Pump #2
 - Worthington vertical turbine pump with 16MF mixed flow, water flush lubrication, 1175RPM, 73' TDH.
- Removal and replacement of filter media for Filter #11 to include grouting as required and factory authorized inspection;
- Replace main doors at Windsor Booster Station as follows:
 - Replace two (2) 3' X 6' 8" metal doors;
 - Repair block;
 - Paint to match building;
- ~~Fill in abandoned basins as identified in Attachment 1 to this Exhibit A as follows:~~

- Remove and re-install fencing as needed for access;
- Build temporary road for access to basins;
- Provide and place MDOT standard fill material B-0 through B-15;
- Grade to ensure positive drainage;
- Install sod (irrigation to be provided by CLIENT);
- Replace roof on fluoride building
 - Remove existing coal tar roof to structural concrete;
 - Adhere 1/8" tapered system with approved adhesive;
 - Adhere 1/4" sopraboard with approved adhesive;
 - Cold apply or heat weld modified bitumen base sheet;
 - Cold apply or heat weld modified bitumen cap sheet;
 - All edge metal to be removed and replaced with 0.040" aluminum;
- Replace existing Sabre manual chlorine dioxide generator and feed system with similar type, size, and capacity unit.
- Repair filters #17, #18, #19, #21, #22, and #26;
- Replace check valve on pump #3;
- Replace gate valve in clearwell;
- Provide automation and controls for Laurel Street Gate;
- Install keycard access on twenty (20) doors and the gate at Laurel Street. Includes all material, maglocks, readers, REX push buttons, cabling and labor.

SIEMENS will provide parts, repairs and upgrades to the O.B. Curtis WTP as follows:

- Provide a one (1) year inventory of ultraviolet reactor system parts and supplies according to the following table:

Description	Qty
Lamp	54
Sleeve, Quartz	4
Sleeve, Sensor	1
O-ring, Outer Access Port	54
O-ring, Sleeve Sealing	54
O-ring, Sensor Sleeve	54
Wiper Assembly	8
Wiper Seal Kit	72
Wiper Seal	46
Wiper, Sensor Sleeve	48
Washer, D-Style	4
Screw 10-24 x 3/8 Shoulder	4
Screw 1-40 x 3/8 Phillips, Diaphragm	4
Wiper Drive Screw Assembly	4
Motor Assembly, with Mount 90 VDC	1
Coupling Kit, Drive	1
Revolution Proximity Sensor	1
Reed Assembly, Homing 12-24 Sensor	1
Reed Assembly, Homing Sensor	1
Magnet Assembly, Homing	1

Description	Qty
Wiper Lead Nut	4
Magnet Assembly, Homing	1
Reed Assembly, Housing	1
Sensor Assembly, Double	1
Level Sensor	1
Relay, Mercury 100A	2
Cap 1.4mF 3000V	2
Cap 1.75mF 3000V	2
Relay, Ground Fault Digital	1
Ballast (Electromagnetic)	1
Fan, 114VCE 0.24A (6" x 6")	1
Fan Filter (5-Pack)	2
Fan Gasket Seal (5-Pack)	2
Cleaner, Acil Clean gel solution	15
Lamp, UVT	3
Ballast, UVT	2
Board, Driver Bipolar Stepper	1
Linear Motor Assembly	1
100% UVT Solution (1 Gallon)	2

- Provide quarterly service/maintenance labor for twenty-four (24) months during the Construction Period for Trojan ultraviolet system as follows:
 - Forty (40) hours on-site per quarterly visit to perform inspection and service of the system;
 - Thirty-two (32) hours of emergency service with 48 hour response time;
 - 24/7 telephone technical support;
- Replace raw water and pre-oxidation perimeter lights with similar materials;

- Run signal wire in conduit for front-end turbidimeter for sedimentation basins to junction box at pre-treatment structure;
- Replace door on walk-in HV switch gear;
- Install two (2) 2' x 6' sluice gates with grating modifications as needed to original rapid mix for isolation during maintenance;
- Repair and recoat Dryvit building exterior finishes as follows:
 - Clean Dryvit on sludge building;
 - Clean Dryvit, patch cracks and holes, and repair cornice on east side of chemical feed building;
 - Clean coating on concrete, patch cracks and holes where coating delaminated at influent pump station;
 - Clean coating on concrete, patch cracks and holes in DryVit and coating on membrane building;
 - Clean DryVit, clean coating on concrete, patch cracks and holes in DryVit and coating on filter building;
 - Clean DryVit, recoat DryVit at sides and rear, recoat Dryvit to wainscot band on front of administration/lab building;
 - Clean coating on concrete foundation of high service pump building;
 - Clean coating on concrete, patch cracks and holes where coating has delaminated on pre-oxidation basin;
- Inspect and repair/replace four (4) 60 HP raw water pumps and associated variable frequency drives;
- Replace sludge plant roof as follows:
 - Install furring over existing shingle roof;
 - Install metal roof with exposed fasteners;
 - Color to match existing building;
- Replace existing 6,000 CFM dehumidification unit with new Bry-Air (or similar) packaged dehumidification system to include:
 - Control panel;
 - Rotor drive assembly;
 - Outlet dampers;
 - Structural skid mounted;
 - Pre-wired with disconnect switch;
- Replace motor guards on High Service Pump #3;
- Replace motor guards on High Service Pump #4;
- Backwash Pump #11
 - Replace two (2) motor guards;
 - Replace vibration sensor;
- High Service Pump #2
 - Replace expansion joint;
- High Service Pump #5
 - Replace relief valve;
 - Replace two (2) start solenoids;
 - Replace motor guards;
 - Replace vibration sensor;
- Backwash Pump #2
 - Replace vibration sensor;
 - Replace two (2) motor guards;
- High Service Pump #10
 - Replace vibration sensor;
 - Replace two (2) motor guards;
- Install 0-8 MGD Rosemont Indicator on flow meter for Filter #3;
- Install alternating board for filter gallery sump pumps;
- Replace #2 spray wash valve on raw water screen;
- Install sixteen (16) 624U Watson Marlow (or similar) two-headed diaphragm pumps for

- lime, ACH, polymer, and caustic and install new controls in chemical feed building;
- Replace one (1) 3 HP, 3,450 RPM raw water pump for membrane pilot plant;
- Fabricate and install covers for membrane building air compressors;
- Inspect and perform miscellaneous repairs for all pH and turbidimeters as needed;
- Install new remote controls board for Membrane Rapid Mix Basin #1;
- Install new remote controls board for Membrane Rapid Mix Basin #2;
- Provide parts to repair sluice gate motor on Train #1;
- Provide parts to replace reject actuator and solenoid in membrane building;
- Repair temperature meter on membrane tanks;
- Replace all collapsed hoses in membrane recovery feed system;
- Install two (2) new backup 2 HP sump pumps in chemical building;
- High Service Pump #1
 - Replace motor guards;
- High Service Pump #8
 - Replace bearings;
 - Repair pump and 800 HP motor;
- Replace twenty-four inch (24") High Service Pump #1 flow meter;
- Design and install gate valve to separate the two rapid mixers as follows:
 - Cut and demolish existing asphalt;
 - Install new forty-two inch (42") gate valve in existing pre-stressed pipe to include all fitting and evacuation shoring;
 - Backfill and repair asphalt;
- Replace one (1) Philadelphia 15 HP back up mixer (or similar);
- Replace twenty-four inch (24") High Service Pump #2 flow meter;
- Replace float for filter gallery sump pump;
- Repair two (2) 150 HP raw water pumps and motors and replace drives;
- Miscellaneous SCADA additions
 - Read pH from SCADA system;
 - Program temperature display and trend output for raw water, high service water, and first tap;
- Inspect and clean out raw water line from intake to plant
 - Inspection and cleaning will be performed over a thirty (30) day period by professional divers to include clam removal;
 - Before and after video will be provided;
- Raw Water Pump #2
 - Replace pressure switch;
 - Replace solenoid valve;
 - Inspect/Repair plumbing;
- Testing of the backup Nissan meter with results to be provided to the CLIENT;
- Correct discrepancy between particle counter and computer display for Train #3;
- Repair finished water pressure meter in High Service Bay #2;
- Repair Centrifuge #1 as follows:
 - Remove and ship to repair facility;
 - Disassemble, clean and inspect rotating assembly including gearbox;
 - Repair register fits for solid and liquid bowl hubs;
 - Repair feed zone liner and accelerator and replace surface erosion protection;
 - Replace conveyor tiles as required;
 - Dynamically balance bowl and conveyor to ISO G1.0 tolerance;
 - Assemble conveyor with new bearings, seal and o-rings;
 - Assemble bowl hubs with new bearings, seal and o-rings;
 - Assemble gearbox with new bearings, seals and o-rings;
 - Replace rotor fasteners as required and paint bearing housings;
 - Perform four (4) hours function test;
 - Record vibration and bearing temperature readings;

- o Return shipping to CLIENT and re-install;
- During the Construction Period, provide twenty-four (24) months of service, training, and monitoring for membrane ultra filtration equipment to include:
 - o Automated data collection and web-accessible, graphical reporting;
 - o Bi-weekly review of data and communication of issues to CLIENT;
 - o Provide a semi-annual management report with analysis of key trends and recommendations to improve plant operation, membrane cleaning and overall performance;
 - o 24/7 emergency telephone technical support;
 - o Three (3) site visits by a factory service representative for five (5) days or forty (40) hours, commencing 8:00 AM on a Monday until this time has elapsed.
- ~~Provide one (1) year renewal of IFix Software, Allen Bradley (PLC's), and AGAD Software;~~
- Replace six (6) plant computers to be used for maintenance supervisor, chemist, sludge building, plant engineer, HMI client, and HMI Historian;
- ~~Upgrade radios and interface for communication support and replace the radio repeater;~~
- ~~Install ten (10) security cameras in a location within the Water Treatment Plant to be selected by CLIENT;~~
- Provide one (1) set of ultrafilters to replace damaged and unusable inventory. SIEMENS to provide material only;
- Replace pump #4 and auxiliary boards in carbon room;
- Repair membrane color analyzer;
- Replace transfer pump for Membrane Manganese Analyzer;
- Replace membrane air inlet valve;
- Replace reject valve for train #1;
- Repair fan on southeast compressor unit on membrane building roof;
- Install HMI for Moryno pumps in discharge plant;
- ~~Conduct an electrical study as follows:~~
 - ~~Coordinate all electrical circuits;~~
 - ~~Develop one line diagram;~~
 - ~~Complete flash arc study;~~
- Replace chlorine dioxide system;
- Replace drives for polymer gravity thickener;
- Provide programming for GT Pumps computer;
- Repair conventional filter surface wash system;
- Replace all eighteen (18) valves on the clarivac system;
- Repair Moryno pump #2.

SIEMENS will provide sewer collection line repairs at the below locations. This includes labor and material for a complete line repair as described. Asphalt repairs, erosion control, bypass pumping, select fill, traffic control, and fence removal/replacement are included on an as-needed basis.

- Wilshire Avenue
 - o Remove and replace 600 linear feet of twenty-one inch (21") sewer line;
 - o Remove and replace 400 linear feet of eighteen inch (18") sewer line;
 - o Includes three (3) manholes;
 - o Includes one (1) stream crossing;
- 300 Block of Rollingwood Drive
 - o Remove and replace 1,140 linear feet of eight inch (8") and ten inch (10") sewer line;
 - o Includes four (4) manholes;
 - o Includes one (1) stream crossing;
- 2704 Quail Run at Eastover
 - o Remove and replace 320 linear feet of twelve inch (12") sewer line;

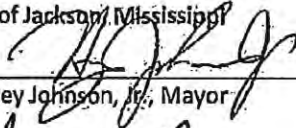
- 2115 Robin Drive
 - Remove and replace 1,125 linear feet of twelve inch (12") sewer line;
 - Includes six (6) manholes;
- 220 Dixon Road to I-220
 - Remove and replace 1,200 linear feet of twelve inch (12") sewer line;
 - Includes three (3) manholes;
- East Northside Drive
 - Relocate 500 linear feet of sewer line from side of street to middle of street from Eastwood Road to Culleywood Drive;
 - Includes two (2) manholes;
- Pearl Street
 - Remove and replace 260 linear feet of eight inch (8") sewer line;
 - Includes two (2) manholes;
- 2234 West Highway 80
 - Repair of thirty inch (30") sewer line from Lynch Creek interceptor at Hattiesburg Street going west to the north turn of line;
- McClure Road at Meadow Lane
 - Replace 2,250 linear feet of fifteen inch (15") sewer line;
 - Replace ten inch (10") sewer line with a fifteen inch (15") sewer line from intersection of Meadow Lane and Wildwood Terrace to South Sunset Terrace;
- 3838 Eastover Drive to 3900 Eastover Drive
 - Replace six inch (6") sewer line with eight inch (8") sewer line;
 - Includes five (5) manholes;
- Beasley Road to Meadow Road
 - Repair of thirty inch (30") sewer line;
 - Includes two (2) stream crossings and lining of pipe;
- 2212 Heritage Hill Drive
 - Remove and replace 400 linear feet of eight inch (8") sewer line;
 - Includes one (1) manhole;
- 5044 Wayneland Drive
 - Removal of 700 linear feet of six inch (6") sewer line;
 - Replace six inch (6") sewer line with eight inch (8") sewer line;
 - Includes two (2) manholes;
- South Drive/ Galvez Street to Jayne Avenue
 - Remove and replace 2,300 linear feet of twenty-one inch (21") sewer line;
 - Includes six (6) manholes;
 - Includes two (2) stream crossings;
- Liberty Street to Coleman Avenue
 - Remove and replace 60 linear feet of fifteen inch (15") sewer line;
 - Includes one (1) stream crossing.
- 1500 Block of Sheffield Drive
 - Repair 8" Sewer Line Collapse
- In addition to the aforementioned projects, Siemens will allocate \$2,327,292~~4,000,000~~ in cost for the inclusion of additional sewer line projects to be selected during construction from the below list.
 - Wilshire to Bailey Drive – CIPP line 18" line
 - Sunset Drive at Christian Brother Apartments – Repair 15" Sewer Line
 - Maple Street – Repair sewer line collapse of 36" & 15"

Exhibit C, Article 2: Measurement and Verification Options, Table 2.1—Savings for First Annual Period by M&V Option is deleted in its entirety and replaced with the following revised Table 2.1:

FIM	Energy/Utility Savings \$			Operational Savings \$	Total Savings \$	Estimated Cost	Payback Years
	Applicable M & V Options						
	A Retrofit Isolation: Key Parameter Measurement	E Stipulated	TOTAL Energy/Utility Savings	E Stipulated			
Automatic Metering System Upgrade	\$2,421,737	\$1,003,604	\$3,425,341	\$2,015,200	\$5,440,541	\$65,300,947	12.0
WTP and WWTP Repairs	-	-	-	\$1,750,000	\$1,750,000	\$25,682,106	14.7
TOTALS	\$2,421,737	\$1,003,604	\$3,425,341	\$3,765,200	\$7,190,541	\$90,983,106	12.7

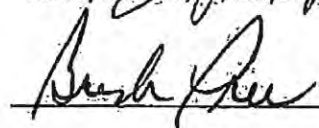
WHEREFORE, this Amendment amends and modifies the Agreement. In all other respects, the terms and conditions of the Agreement remain in full force and effect. The Parties have caused this Amendment to be signed by their duly authorized representatives, and this Amendment may be executed in counterparts, each of which shall be deemed an original and together shall constitute one and the same instrument.

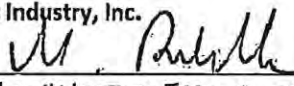
DATED this 28th day of March, 2013.

Agreed for City of Jackson, Mississippi
(Signature) by: 

Harvey Johnson, Jr., Mayor

City Clerk Attest:



Agreed for Siemens Industry, Inc.
(Signature) by: 

Print Name and Title: MATTHIAS REBELLEN, PRESIDENT

(Signature) by: 

Print Name and Title: MARK EVANS VP F&B

Foley
Molly

**AMENDMENT NO. 3 TO
PERFORMANCE CONTRACTING AGREEMENT
BETWEEN**

CITY OF JACKSON, MISSISSIPPI

AND

**Siemens Industry, Inc.,
Building Technologies Division**

WITNESSETH:

WHEREAS, the City of Jackson (hereinafter "CLIENT") and Siemens Industry, Inc, Building Technologies Division (hereinafter "SIEMENS") entered into a Performance Contracting Agreement for City of Jackson, MS, Water Infrastructure Improvements on January 30, 2013, and subsequently entered into Amendment No. 1 dated February 22, 2013 and Amendment No. 2 dated March 28, 2013; and

WHEREAS, the parties now desire to further revise portions of Exhibit A, the scope of work required under the Agreement, and to correspondingly revise certain portions of Exhibit B, the price for all work to be performed under the Agreement, and certain portions of Exhibit C, the operational savings derived from the amended scope of work. For purposes of clarity, items to be removed from the initial Agreement or prior amendments are shown as stricken; items to be inserted are shown as underlined text.

NOW THEREFORE, as a result of the Recitals, which are specifically incorporated herein and for the other good and valuable consideration, the Parties agree to amend the Agreement as follows:

Exhibit A, Article 1, Section 1.2.2 is revised as follows:

1.2.2 WTP and Sewer Collection Line Repairs - Except as otherwise expressly provided herein, SIEMENS will provide all Equipment, material and labor to perform the following:

SIEMENS will provide parts, repairs, and upgrades to the J.H. Fewell Water Treatment Plant (WTP) as follows:

- **Chemical Feed Repairs**
 - Inspection and replacement of existing motor, switchover valve, ammoniators, chlorinators, chlorine injector, chemical feed pumps, CL2 analyzers and associated piping;
 - Provide up to six (6) on-site visits (not to exceed 8 hours each) to calibrate and adjust the system to ensure proper operation;
- **Provide quarterly service/maintenance labor for twenty-four (24) months during the Construction Period for Trojan ultraviolet system as follows:**
 - Forty (40) hours on-site per quarterly visit to perform inspection and service of the system;
 - Thirty-two (32) hours of emergency service with 48-hour response time.
 - 24/7 telephone technical support;
- **Provide up to twenty-four months of service during the Construction Period for the Controls Systems, Inc. controls system as follows:**

- o Limited to 400 total hours per year between the hours of 7:00 AM to 4:30 PM CST, Monday thru Friday;
 - o Two (2) hour response time during the hours defined above;
 - o Minimum charge of one (1) hour per service call;
- Recoat Elaine water storage tank as follows:
 - o Remove existing coatings;
 - o Apply one (1) coat of zinc clad coating;
 - o Apply one (1) coat of protective epoxy coating;
 - o Apply one (1) coat of high gloss, polyurethane sealer;
 - o Application of CLIENT's logo is included;
 - o Exclusion: No tank repairs are included.
- Replace Clearwell Pump #2
 - o Worthington vertical turbine pump with 16MF mixed flow, water flush lubrication, 1175RPM, 73' TDH.
- Removal and replacement of filter media for Filter #11 to include grouting as required and factory authorized inspection;
- Replace main doors at Windsor Booster Station as follows:
 - o Replace two (2) 3' X 6' 8" metal doors;
 - o Repair block;
 - o Paint to match building;
- Replace roof on fluoride building
 - o Remove existing coal tar roof to structural concrete;
 - o Adhere 1/8" tapered system with approved adhesive;
 - o Adhere 1/4" sopraboard with approved adhesive;
 - o Cold apply or heat weld modified bitumen base sheet;
 - o Cold apply or heat weld modified bitumen cap sheet;
 - o All edge metal to be removed and replaced with 0.040" aluminum;
- Replace existing Sabre manual chlorine dioxide generator and feed system with similar type, size, and capacity unit.
- Repair filters #17, #18, #19, #21, #22, and #26;
- Replace check valve on pump #3;
- ~~Replace gate valve in clearwell;~~

SIEMENS will provide parts, repairs and upgrades to the O.B. Curtis WTP as follows:

- Provide quarterly service/maintenance labor for twenty-four (24) months during the Construction Period for Trojan ultraviolet system as follows:
 - o Forty (40) hours on-site per quarterly visit to perform inspection and service of the system;
 - o Thirty-two (32) hours of emergency service with 48 hour response time;
 - o 24/7 telephone technical support;
- Replace raw water and pre-oxidation perimeter lights with similar materials;
- ~~Run signal wire in conduit for front end turbidimeter for sedimentation basins to junction box at pre-treatment structure;~~
- Replace door on walk-in HV switch gear;
- Install two (2) 2' x 6' sluice gates with grating modifications as needed to original rapid mix for isolation during maintenance;
- Repair and recoat Dryvit building exterior finishes as follows:
 - o Clean Dryvit on sludge building;
 - o Clean Dryvit, patch cracks and holes, and repair cornice on east side of chemical feed building;
 - o Clean coating on concrete, patch cracks and holes where coating delaminated at influent pump station;
 - o Clean coating on concrete, patch cracks and holes in DryVit and coating on membrane building;
 - o Clean DryVit, clean coating on concrete, patch cracks and holes in DryVit and coating on filter building;
 - o Clean DryVit, recoat DryVit at sides and rear, recoat Dryvit to wainscot band on front

- of administration/lab building;
 - o Clean coating on concrete foundation of high service pump building;
 - o Clean coating on concrete, patch cracks and holes where coating has delaminated on pre-oxidation basin;
- ~~Inspect and repair/replace four (4) 60 HP raw water pumps and associated variable frequency drives;~~
- Replace sludge plant roof as follows:
 - o Install furring over existing shingle roof;
 - o Install metal roof with exposed fasteners;
 - o Color to match existing building;
- Replace existing 6,000 CFM dehumidification unit with new Dry-Air (or similar) packaged dehumidification system to include:
 - o Control panel;
 - o Rotor drive assembly;
 - o Outlet dampers;
 - o Structural skid mounted;
 - o Pre-wired with disconnect switch;
- Replace motor guards on High Service Pump #3;
- Replace motor guards on High Service Pump #4;
- Backwash Pump #11
 - o Replace two (2) motor guards;
 - o Replace vibration sensor;
- High Service Pump #2
 - o Replace expansion joint;
- High Service Pump #5
 - ~~Replace relief valve;~~
 - ~~Replace two (2) start solenoids;~~
 - o Replace motor guards;
 - o Replace vibration sensor;
- Backwash Pump #2
 - o Replace vibration sensor;
 - o Replace two (2) motor guards;
- High Service Pump #10
 - o Replace vibration sensor;
 - o Replace two (2) motor guards;
- ~~Install 0.8 MGD Rosemount indicator on flow meter for Filter #3;~~
- Install alternating board for filter gallery sump pumps;
- ~~Replace #2 spray wash valve on raw water screen;~~
- Install sixteen (16) 624U Watson Marlow (or similar) two-headed diaphragm pumps for lime, ACH, polymer, and caustic and install new controls in chemical feed building;
- Replace one (1) 3 HP, 3,450 RPM raw water pump for membrane pilot plant;
- Fabricate and install covers for membrane building air compressors;
- Inspect and perform miscellaneous repairs for all pH and turbidimeters as needed;
- ~~Install new remote controls board for Membrane Rapid Mix Basin #1;~~
- ~~Install new remote controls board for Membrane Rapid Mix Basin #2;~~
- ~~Provide parts to repair sluice gate motor on Train #1;~~
- Provide parts to replace reject actuator and solenoid in membrane building;
- Repair temperature meter on membrane tanks;
- Replace all collapsed hoses in membrane recovery feed system;
- Install two (2) new backup 2 HP sump pumps in chemical building;
- ~~High Service Pump #1~~
 - o ~~Replace motor guards;~~
- High Service Pump #8
 - o Replace bearings;
 - o Repair pump and 800 HP motor;
- ~~Replace twenty-four inch (24") High Service Pump #1 flow meter;~~
- Design and install gate valve to separate the two rapid mixers as follows:

- o Cut and demolish existing asphalt;
 - o Install new forty-two inch (42") gate valve in existing pre-stressed pipe to include all fitting and evacuation shoring;
 - o Backfill and repair asphalt;
- Replace one (1) Philadelphia 15 HP back up mixer (or similar);
- ~~• Replace twenty four inch (24") High Service Pump #2 flow meter;~~
- Replace float for filter gallery sump pump;
- ~~• Repair two (2) 150 HP raw water pumps and motors and replace drives;~~
- Miscellaneous SCADA additions
 - o Read pH from SCADA system;
 - o Program temperature display and trend output for raw water, high service water, and first tap;
- Inspect and clean out raw water line from intake to plant
 - o Inspection and cleaning will be performed over a thirty (30) day period by professional divers to include clam removal;
 - o Before and after video will be provided;
- ~~• Raw Water Pump #2~~
 - ~~o Replace pressure switch;~~
 - ~~o Replace solenoid valve;~~
 - ~~o Inspect/Repair plumbing;~~
- Testing of the backup Nissan meter with results to be provided to the CLIENT;
- ~~• Correct discrepancy between particle counter and computer display for Train #3;~~
- ~~• Repair finished water pressure meter in High Service Bay #2;~~
- Repair Centrifuge #1 as follows:
 - o Remove and ship to repair facility;
 - o Disassemble, clean and inspect rotating assembly including gearbox;
 - o Repair register fits for solid and liquid bowl hubs;
 - o Repair feed zone liner and accelerator and replace surface erosion protection;
 - o Replace conveyor tiles as required;
 - o Dynamically balance bowl and conveyor to ISO G1.0 tolerance;
 - o Assemble conveyor with new bearings, seal and o-rings;
 - o Assemble bowl hubs with new bearings, seal and o-rings;
 - o Assemble gearbox with new bearings, seals and o-rings;
 - o Replace rotor fasteners as required and paint bearing housings;
 - o Perform four (4) hours function test;
 - o Record vibration and bearing temperature readings;
 - o Return shipping to CLIENT and re-install;
- During the Construction Period, provide twenty-four (24) months of service, training, and monitoring for membrane ultra filtration equipment to include:
 - o Automated data collection and web-accessible, graphical reporting;
 - o Bi-weekly review of data and communication of issues to CLIENT;
 - o Provide a semi-annual management report with analysis of key trends and recommendations to improve plant operation, membrane cleaning and overall performance;
 - o 24/7 emergency telephone technical support;
 - o Three (3) site visits by a factory service representative for five (5) days or forty (40) hours, commencing 8:00 AM on a Monday until this time has elapsed.
- ~~• Replace six (6) plant computers to be used for maintenance supervisor, chemist, sludge building, plant engineer, HMI client, and HMI Historian;~~
- Provide one (1) set of ultrafilters to replace damaged and unusable inventory. SIEMENS to provide material only;
- ~~• Replace pump #4 and auxiliary boards in carbon room;~~
- Provide one (1) set of ultrafilters to replace damaged and unusable inventory
- Repair membrane color analyzer;
- Replace transfer pump for Membrane Manganese Analyzer;
- ~~• Replace membrane air inlet valve;~~
- Replace reject valve for train #1;
- Repair fan on southeast compressor unit on membrane building roof;

- ~~Install HMI for Moryno pumps in discharge plant;~~
- Replace chlorine dioxide system;
- ~~Replace drives for polymer gravity thickener;~~
- ~~Provide programming for GT Pumps computer;~~
- ~~Repair conventional filter surface wash system;~~
- Replace all eighteen (18) valves on the clarivac system;
- ~~Repair Moryno pump #2.~~

SIEMENS will provide sewer collection line repairs at the below locations. This includes labor and material for a complete line repair as described. Asphalt repairs, erosion control, bypass pumping, select fill, traffic control, and fence removal/replacement are included on an as-needed basis.

- Wilshire Avenue
 - Remove and replace 600 linear feet of twenty-one inch (21") sewer line;
 - Remove and replace 400 linear feet of eighteen inch (18") sewer line;
 - Includes three (3) manholes;
 - Includes one (1) stream crossing;
- 300 Block of Rollingwood Drive
 - Remove and replace 1,140 linear feet of eight inch (8") and ten inch (10") sewer line;
 - Includes four (4) manholes;
 - Includes one (1) stream crossing;
- 2704 Quail Run at Eastover
 - Remove and replace 320 linear feet of twelve inch (12") sewer line;
- 2115 Robin Drive
 - Remove and replace 1,125 linear feet of twelve inch (12") sewer line;
 - Includes six (6) manholes;
- 220 Dixon Road to I-220
 - Remove and replace 1,200 linear feet of twelve inch (12") sewer line;
 - Includes three (3) manholes;
- East Northside Drive
 - Relocate 500 linear feet of sewer line from side of street to middle of street from Eastwood Road to Culleywood Drive;
 - Includes two (2) manholes;
- Pearl Street
 - Remove and replace 260 linear feet of eight inch (8") sewer line;
 - Includes two (2) manholes;
 - Remove and replace 100 additional feet of (14") ductile iron pipe, connect to existing water line installed under allowance scope below and patch asphalt.
- 2234 West Highway 80
 - Repair of thirty inch (30") sewer line from Lynch Creek interceptor at Hattiesburg Street going west to the north turn of line;
- McClure Road at Meadow Lane
 - Replace 2,250 linear feet of fifteen inch (15") sewer line;
 - Replace ten inch (10") sewer line with a fifteen inch (15") sewer line from intersection of Meadow Lane and Wildwood Terrace to South Sunset Terrace;
- 3838 Eastover Drive to 3900 Eastover Drive
 - Replace six inch (6") sewer line with eight inch (8") sewer line;
 - Includes five (5) manholes;
- Beasley Road to Meadow Road
 - Repair of thirty inch (30") sewer line;
 - Includes two (2) stream crossings and lining of pipe;
- 2212 Heritage Hill Drive
 - Remove and replace 400 linear feet of eight inch (8") sewer line;
 - Includes one (1) manhole;
- 5044 Wayneland Drive
 - Removal of 700 linear feet of six inch (6") sewer line;
 - Replace six inch (6") sewer line with eight inch (8") sewer line;
 - Includes two (2) manholes;
- South Drive/ Galvez Street to Jayne Avenue

- o Remove and replace 2,300 linear feet of twenty-one inch (21") sewer line;
 - o Includes six (6) manholes;
 - o Includes two (2) stream crossings;
- Liberty Street to Coleman Avenue
 - o Remove and replace 60 linear feet of fifteen inch (15") sewer line;
 - o Includes one (1) stream crossing.
- 1500 Block of Sheffield Drive
 - o Repair 8" Sewer Line Collapse
- In addition to the aforementioned projects, Siemens will allocate \$2,327,292 in cost for the inclusion of additional sewer line projects to be selected during construction from the below list.
 - o ~~Wilshire to Bailey Drive — CIPP line 18" line~~
 - o ~~Sunset Drive at Christian Brother Apartments — Repair 15" Sewer Line~~
 - o ~~Maple Street — Repair sewer line collapse of 36" & 15"~~
 - o Pearl Street - install 300 linear feet of (14") ductile iron pipe 200 linear feet east of Farish Street to 165 linear feet west of Lamar Street
 - o W McDowell Road near Hickory Drive — repair 305 linear feet of (8") sanitary sewer line
 - o Beatty Street from Zhender Street to Allen Street — replace 250 linear feet of (8") sanitary sewer line
 - o Pleasant Avenue from Glendale Street to Hull Street — install 200 linear feet of (12") sanitary sewer line

Exhibit B, Article 1: Payment of Scope of Work is revised as follows:

- 1.1 **Price:** As full consideration of the Work as described in Exhibit A, Article 1: Scope of Work, the CLIENT shall pay to SIEMENS \$89,800,267 (plus taxes, if applicable). The price change is a result of credits for deleted Work listed in Exhibit A in the amount of (\$1,278,839) and added Work listed in Exhibit A in the amount of \$96,000 applied against the original Price of \$90,983,106 which results in the revised price of \$89,800,267.
- 1.2 **Escrow:** The CLIENT has agreed to deposit the Price into an Escrow Account at a financial institution satisfactory to both the CLIENT and SIEMENS. All expenses to establish the Escrow Account shall be the complete responsibility of the CLIENT and the CLIENT will receive all interest earnings from the Escrow Account. SIEMENS will submit periodic invoices to the CLIENT based on the Payment Schedule in Table B.1. The CLIENT shall be responsible for submitting the necessary documents to the Escrow Agent to allow for timely disbursements from the Escrow Account. The funding of the Escrow Account in an amount equal to or greater than the Price stated in Article 1.1 above shall be a condition precedent to SIEMENS obligation to perform or to continue the performance of the Work. If the Escrow Account is not funded within 90 days of the execution of this Agreement, this Agreement may be terminated by either party with seven (7) calendar days advance written notice. This 90 day funding period may be extended as mutually agreed in writing by the Parties. In the event that the Agreement is terminated as described in this paragraph and CLIENT has previously authorized SIEMENS to proceed with the Work, the CLIENT shall be obligated to reimburse SIEMENS either: (i) for the Work performed to date; or (ii) for the Work specifically authorized by the CLIENT....
- 1.3 **Timely Payments:** The CLIENT agrees to pay SIEMENS per Table B.1. CLIENT agrees to pay all invoices submitted by SIEMENS per Article 8 of the Agreement.

Table B.1 – Anticipated Work Payment Schedule

Project Phase	Payments (\$)	Payments (Actual % Complete)
Month 1	Actual Complete	Actual Complete
Month 2	Actual Complete	Actual Complete
Month 3	Actual Complete	Actual Complete
Month 4	Actual Complete	Actual Complete
Month 5	Actual Complete	Actual Complete
Month 6	Actual Complete	Actual Complete
Month 7	Actual Complete	Actual Complete
Month 8	Actual Complete	Actual Complete
Month 9	Actual Complete	Actual Complete
Month 10	Actual Complete	Actual Complete
Month 11	Actual Complete	Actual Complete
Month 12	Actual Complete	Actual Complete
Month 13	Actual Complete	Actual Complete
Month 14	Actual Complete	Actual Complete
Month 15	Actual Complete	Actual Complete
Month 16	Actual Complete	Actual Complete
Month 17	Actual Complete	Actual Complete
Month 18	Actual Complete	Actual Complete
Month 19	Actual Complete	Actual Complete
Month 20	Actual Complete	Actual Complete
Month 21	Actual Complete	Actual Complete
Month 22	Actual Complete	Actual Complete
Month 23	Actual Complete	Actual Complete

Month 24	Actual Complete	Actual Complete
Month 25	Actual Complete	Actual Complete
Month 26	Actual Complete	Actual Complete
Month 27	Actual Complete	Actual Complete
Month 28	Actual Complete	Actual Complete
Month 29	Actual Complete	Actual Complete
Month 30	Actual Complete	Actual Complete
PROJECT TOTAL:	\$89,800,267	100%

Exhibit C, Article 1: Summary of Articles and Total Guaranteed Savings, Table 1.2—Total Guaranteed Savings (Cost) is amended as follows:

Table 1.2 – Total Guaranteed Savings (Cost)					
Performance Period	Small Meter Billable Usage Increase \$	Large Meter Billable Usage Increase \$	Operational Savings \$	Deferred Maintenance Savings \$	Total Savings \$
Annual Period 0	\$484,347	\$501,802	\$503,750	-	\$1,489,899
Annual Period 1	\$2,421,737	\$1,003,604	\$2,015,200	\$1,669,404	\$7,109,945
Annual Period 2	\$2,555,055	\$1,003,604	\$2,075,656	\$1,669,404	\$7,303,719
Annual Period 3	\$2,688,373	\$1,003,604	\$2,137,926	\$1,669,404	\$7,499,307
Annual Period 4	\$2,821,691	\$1,003,604	\$2,202,063	\$1,669,404	\$7,696,762
Annual Period 5	\$2,955,010	\$1,003,604	\$2,268,125	\$1,669,404	\$7,896,143
Annual Period 6	\$2,955,010	\$1,003,604	\$2,336,169	\$1,669,404	\$7,964,187
Annual Period 7	\$2,955,010	\$1,003,604	\$2,406,254	\$1,669,404	\$8,034,272
Annual Period 8	\$2,955,010	\$1,003,604	\$2,478,442	\$1,669,404	\$8,106,460
Annual Period 9	\$2,955,010	\$1,003,604	\$2,552,795	\$1,669,404	\$8,180,813
Annual Period 10	\$2,955,010	\$1,003,604	\$2,629,379	\$1,669,404	\$8,257,397
Annual Period 11	\$2,955,010	\$1,003,604	\$2,708,260	\$1,669,404	\$8,336,278
Annual Period 12	\$2,955,010	\$1,003,604	\$2,789,508	\$1,669,404	\$8,417,526
Annual Period 13	\$2,955,010	\$1,003,604	\$2,873,193	\$1,669,404	\$8,501,211
Annual Period 14	\$2,955,010	\$1,003,604	\$2,959,389	\$1,669,404	\$8,587,407
Annual Period 15	\$2,955,010	\$1,003,604	\$3,048,171	\$1,669,404	\$8,676,189
TOTALS	\$43,476,313	\$15,555,862	\$37,984,280	\$25,041,060	\$122,057,515

Exhibit C, Article 2: Measurement and Verification Options, Table 2.1—Savings for First Annual Period by M&V Option is deleted in its entirety and replaced with the following revised Table 2.1:

FIM	Energy/Utility Savings \$			Operational Savings \$	Total Savings \$	Estimated Cost	Payback Years	Estimated Life of Measures
	Applicable M & V Options							
	A Retrofit Isolation: Key Parameter Measurement	E Stipulated	TOTAL Energy/Utility Savings	E Stipulated				
Automatic Metering System Upgrade	\$2,421,737	\$1,003,604	\$3,425,341	\$2,015,200	\$5,440,541	\$65,300,947	12.0	20
WTP and WWTP Repairs	-	-	-	\$1,669,404	\$1,669,404	\$24,499,320	14.7	15—equipment repairs 20—structural repairs 25—sewer line repairs
TOTALS	\$2,421,737	\$1,003,604	\$3,425,341	\$3,684,604	\$7,109,945	\$89,800,267	12.6	

Exhibit C, Article 2: Measurement and Verification Options, Table 2.2—Source of Operational Savings is amended as follows:

...

Account/Vendor	Description	Annual Cost \$	# of Annual Periods Savings Are Applied	Annual Period Savings Begin
Manpower	Avoided future employment needs through elimination of new employee requisitions	\$476,000	15	1
Reduction in City Vehicles	Fewer vehicles needed for meter reading	\$46,200	15	1
Reduction in Fuel Consumption	Less fuel consumed for meter reading	\$33,000	15	1
Manpower	Fewer re-reads and less work associated with meter reading	\$400,000	15	1
Meter/Lid Purchases	Less replacement meter/lid purchase requirements	\$240,000	15	1
Manpower	Less work associated with shutoffs/restore of service	\$800,000	15	1
Billing System Maintenance	Elimination of existing billing system maintenance expenditures	\$20,000	15	1
Construction Savings	Portion of the above items that will be achieved during the Construction Period	\$503,750	1	0
O&M Maintenance*	Avoided Deferred Maintenance costs associated with Water Treatment Plants and the City Sewer Collection System	\$1,669,404	15	1

*O&M Maintenance: avoided Deferred Maintenance Annual Cost/savings change from original contract is based on the same simple payback calculation as the original contract. The savings represent a simple payback of 14.7 years (cost/savings). "Deferred Maintenance" is defined in Article 2: Glossary of the Performance Contract Agreement.

All other provisions of the Agreement not specifically amended herein shall remain in full force and effect.

IN WITNESS THEREOF, this Amendment No.3 has been duly executed by the parties hereto, this 2nd day of November, 2015.

Agreed for City of Jackson, Mississippi
(Signature) by: [Signature]

Tony Yarber, Mayor

City Clerk Attest:

[Signature]
Kirsti Moore

Agreed for Siemens Industry, Inc.
(Signature) by: [Signature]

Print Name and Title:

Russell DeNapoli

Director

Field Finance Operations

(Signature) by: [Signature]

Print Name and Title:

Thomas Strollo

Sr. Director

Field Operations

Bouchard
Marc

Digitally signed by Bouchard Marc
DN: cn=Bouchard Marc, o=Siemens, email=Bouchard.Marc@siemens.com, c=US
Date: 2015.10.15 11:41:24 -0500

**AMENDMENT NO. 4 TO
PERFORMANCE CONTRACTING AGREEMENT
BETWEEN**

CITY OF JACKSON, MISSISSIPPI

AND

**Siemens Industry, Inc.,
Building Technologies Division**

WITNESSETH:

WHEREAS, the City of Jackson (hereinafter "CLIENT") and Siemens Industry, Inc, Building Technologies Division (hereinafter "SIEMENS") entered into a Performance Contracting Agreement for City of Jackson, MS, Water Infrastructure Improvements on January 30, 2013, and subsequently entered into Amendment No. 1 dated February 22, 2013 and Amendment No. 2 dated March 28, 2013 and Amendment No. 3 dated November 2, 2015; and

WHEREAS, the parties now desire to further revise portions of Exhibit A, the Scope of Work required under the Agreement, and to correspondingly revise certain portions of Exhibit C, Performance Assurance derived from the amended scope of work. For purposes of clarity, items to be removed from the Initial Agreement or prior amendments are shown as stricken; items to be inserted are shown as underlined text.

NOW THEREFORE, as a result of the Recitals, which are specifically incorporated herein and for the other good and valuable consideration, the Parties agree to amend the Agreement as follows:

Exhibit A, Article 1, Section 1.2.1 is revised as follows:

1.2.1 **Automatic Metering System Upgrade** - Except as otherwise expressly provided herein, SIEMENS will provide all Equipment, material and labor to upgrade the CLIENT's water utility system as follows:

SIEMENS will install an Automatic Metering System to provide hourly reads as follows:

- Install ~~64,998~~ 60,457 water meters with a Mueller Mi.Node Transmitter (or similar);
- Provide ~~340~~ 4,752 water meters with a Mueller Mi.Node Transmitter (or similar) for inventory.
- Install Sixty (60) Mi.Hub Collectors (or similar) to be installed on CLIENT assets;
- Install 900 network repeaters;
- Replace the external batteries for all meters four inches (4") and larger during year eight (8) of the Performance Guarantee Period.
- Perform download of billing account data from the existing Customer Information System (CIS);
- Installation of standard meter data management system and server;
- Perform upload of new meter change information into the existing CIS prior to implementation of new customer care and billing and customer self service software modules;
- Development and installation of a new customer care and billing software module and server;
- Development and installation of a new customer self service software module and server;
- Provide a customized output from the new customer care and billing software module for periodic updating of the CLIENT's existing applications;

- Development and Installation of a new document and bill publishing software module to include one (1) customized Invoice template;
- Provide a customized output from the new customer care and billing and the new document and bill publishing system to be utilized by an external third party bill printing and delivery vendor (to be procured by the CLIENT). This will include the delivery of a bill image to be utilized for printing by the third party bill printing and delivery vendor;
- Hosting and bandwidth will be provided throughout the Construction Period, not to exceed a total of twenty-four (24) months, for the new customer care and billing software module and the new customer self service software module;
- Hosting for the Mueller meter data management system will be provided throughout the Construction Period, not to exceed a total of twenty-four (24) months;
- Provide Interactive Voice Response (IVR) system vendor with standard XAI services or database call information relevant to the new customer care and billing software module;
- Training to include:
 - Field training for meter maintenance staff of proper installation and maintenance of all system components;
 - Technical Support staff – 100 hours of off-site technical training on the new customer care and billing, customer self service, and various applicable output modules during the Construction Period;
 - Technical Support staff – Thirty-two (32) hours of on-site technical training on the fundamentals and implementation of the new customer care and billing software module;
 - Designated Future Trainers – Sixty-four (64) hours of off-site training for the CLIENT's designated trainers who will train new employees and users of the system;
 - System Operators – Sixty-four (64) hours of on-site training to include configuration and future operation of the new customer care and billing software module;
 - System Operators – 160 hours of on-site technical training on the immediate usage of the new customer care and billing software module prior to full implementation;
 - Technical Support Staff – Sixteen (16) hours of off-site training covering the new customer self service software module;
 - Billing Department staff – 200 hours of individual user group (to include administrators, managers, supervisors, clerks, and technical support staff) off-site training specific to their role in utilizing the new customer care and billing software module and the new customer self service software module;
 - Technical Support Staff – Technical training for the metering infrastructure components and operation of/integration into Mueller meter data management system (or similar) to include collectors, wireless (& other) connectivity, and Network Repeaters.
- Commissioning/verification of the system;
- Operations & Maintenance manuals to include:
 - Equipment specification sheets for each component installed including meters, transmitters, MLHub Collectors, Network Repeaters, data servers, and all ancillary Equipment;
 - Operation, maintenance, and training manuals, in both paper and electronic format, for the Equipment listed above;
 - Warranty Information on all provided Equipment (including servers).
- Post Production Technical Support for one (1) year from the date that the new CIS goes live, limited to 500 hours of support.

The necessary auxiliary Equipment such as curb stops, lids, nuts, boxes, bolts & gaskets will be provided as required to install water meters unless specifically noted in the table below. SIEMENS will be responsible for piping and valves for only two feet on either side of the meter. Any leaks in this area caused by the installation of the new meter will be repaired with like for like materials. SIEMENS will provide for the modification of the large meter vaults located in soft surfaces as required for installation of the large meters to include straight line piping modifications, vault wall modifications, and dirt excavation (limited to 45 vaults). SIEMENS will also provide training and administrative support

prior to Substantial Completion of the Project to ensure a functional system. The table below shows the meter quantities that SIEMENS will install for this FIM.

Qty	Description
59,926 <u>55,412</u>	5/8" x 1/2" PD RDM Meter Replacement with MI.Node (or similar)
3,409 <u>2,478</u>	1" PD Meter Replacement with MI.Node (or similar)
517 <u>981</u>	1.5" PD Meter Replacement with MI.Node (or similar)
1,552 <u>1,147</u>	2" PD Meter Replacement with MI.Node (or similar)
499 <u>357</u>	4" Mag Meter Replacement with external battery
82 <u>73</u>	6" Mag Meter Replacement with external battery
6 <u>9</u>	8" Mag Meter Replacement with external battery
3 <u>0</u>	10" Mag Meter Replacement with external battery
3 <u>0</u>	12" Mag Meter Replacement with external battery
60	MI.Hub Collectors (or similar) with solar power system (as applicable)
584	MI.Nodes (or similar) with connectors for Mag Meters
5	Handheld Computers
900	Network Repeaters
229 <u>4,550</u>	5/8" x 1/2" PD RDM Meter with MI.Node (or similar) for Inventory
49 <u>7</u>	1" PD Meter Replacement with MI.Node (or similar) for inventory
49 <u>53</u>	1.5" PD Meter Replacement with MI.Node (or similar) for Inventory
49 <u>54</u>	2" PD Meter Replacement with MI.Node (or similar) for Inventory
9 <u>82</u>	4" Mag Meter Replacement with external battery (or similar) for Inventory

- 85 6" Mag Meter Replacement with external battery (or similar)
for inventory
- 91 10" Mag Meter Replacement with external battery (or similar)
for inventory

The following are considered to be the basis of design for the new CIS being provided and represent the functionality to be provided through this scope.

- Customer Care and Billing Software Module
 - Base Software Module for Residential Customers
 - Credit and Collections for Residential Customers Module
 - Rating and Billing for Residential Customers Module
 - Cashiering for Residential Customers Module
 - Task Optimization Tools for Residential Customers Module
 - Archiving for Residential Customers Module
 - Base Software Module for Commercial and Industrial Customers
 - Credit and Collections for Commercial and Industrial Customers Module
 - Rating and Billing for Commercial and Industrial Customers Module
 - Cashiering for Commercial and Industrial Customers Module
 - Task Optimization Tools for Commercial and Industrial Customers Module
 - Archiving for Commercial and Industrial Customers
- Customer Self Service Software Module
 - Base Software Module for Residential Customers
 - Billing and Payment Management for Residential Customers Module
 - Customer Service Management for Residential Customers Module
 - Base Software Module for Commercial and Industrial Customers
 - Billing and Payment Management for Commercial and Industrial Customers Module
 - Customer Service Management for Commercial and Industrial Customers Module

SIEMENS will provide data conversion Services of two (2) years worth of historical data from the Effective Contract Date for integration into the new CIS as follows:

- Accounts and Customers – The following customers and accounts will be converted along with their respective service agreements:
 - All active accounts as of the Effective Contract Date, limited to the total number of Installed Meters Guaranteed as defined in Section 4.2.1 of Exhibit C;
 - All accounts finalized within one year of the Effective Contract Date;
 - All accounts with a debit balance and finalized within three (3) years of the Effective Contract Date;
 - All accounts with a credit balance and finalized within seven (7) years of the Effective Contract Date.
- Budgets – All active budgets will be converted;
- Deposits – All active deposits will be converted;
- Bill History – Historical bills will be converted in a summary format;
- Payment History – Historical payments will be converted;
- Premises and Service Points – All active premises and service points and those finalized within one (1) year of the Effective Contract Date will be converted;
- Meters – All installed and in-stock meters will be converted.

The following items will not be converted for integration into the new CIS:

- Special payment plans or payment extensions;
- Credit and collections information.
- Pending or completed field orders.

CLIENT will provide the following upon request and within a reasonable amount of time during the Construction Period in order to ensure the correct implementation of the FIM:

- In regards to the customized output from the new document and bill publishing system, selection of a single bill printing and delivery vendor must be provided by the CLIENT prior to this portion of the Work commencing and shall be used as the basis of design for this portion of the Work;
- Provide input and validation of the new bill print format;
- Provide interpretation of data, codes and other requirements as it relates to the current CIS and future needs of the new customer care and billing software module;
- Data cleansing as identified during the Construction Period;
- Provide file formats, examples and additional details as required for the outputs to be used with existing applications;
- Provide copies of all reports that are critical to business upon the Effective Contract Date. This will be limited to the standard report offerings plus up to fifteen (15) additional reports;
- Provide copies of all letters that are sent out based on activities in CIS. This will be limited to a maximum of ten (10) letters;
- Provide information and support on the online payment options and customer self service options in effect as of the Effective Contract Date.

SIEMENS will provide a workforce training program that will focus on training and enlisting motivated individuals to enter or re-enter the workplace who currently face barriers to employment due to extended unemployment periods, incarceration, or military service. These services will include pre-screening assessment tools and staff. Siemens will provide 4,200 hours of actual on the job work training and work for these individuals to be performed throughout the Construction Period. The type of trade work will be limited to the following areas:

- Masonry
- Plumbing
- Electrical
- Carpentry

Exhibit A, Article 1, Section 1.2.2 is revised as follows:

- 1.2.2 WTP and Sewer Collection Line Repairs - Except as otherwise expressly provided herein, SIEMENS will provide all Equipment, material and labor to perform the following:

SIEMENS will provide parts, repairs, and upgrades to the J.H. Fewell Water Treatment Plant (WTP) as follows:

- Chemical Feed Repairs
 - Inspection and replacement of existing motor, switchover valve, ammoniators, chlorinators, chlorine injector, chemical feed pumps, CL2 analyzers and associated

- o piping;
 - o Provide up to six (6) on-site visits (not to exceed 8 hours each) to calibrate and adjust the system to ensure proper operation,
- Provide quarterly service/maintenance labor for twenty-four (24) months during the Construction Period for Trojan ultraviolet system as follows:
 - o Forty (40) hours on-site per quarterly visit to perform inspection and service of the system;
 - o Thirty-two (32) hours of emergency service with 48-hour response time
 - o 24/7 telephone technical support;
- Provide up to twenty-four months of service during the Construction Period for the Controls Systems, Inc controls system as follows:
 - o Limited to 400 total hours per year between the hours of 7:00 AM to 4 30 PM CST, Monday thru Friday;
 - o Two (2) hour response time during the hours defined above,
 - o Minimum charge of one (1) hour per service call;
- Recoat Elaine water storage tank as follows:
 - o Remove existing coatings;
 - o Apply one (1) coat of zinc clad coating;
 - o Apply one (1) coat of protective epoxy coating;
 - o Apply one (1) coat of high gloss, polyurethane sealer;
 - o Application of CLIENT's logo is included;
 - o Exclusion: No tank repairs are included.
- Replace Clearwell Pump #2
 - o Worthington vertical turbine pump with 16MF mixed flow, water flush lubrication, 1175RPM, 73' TDH.
- Removal and replacement of filter media for Filter #11 to include grouting as required and factory authorized inspection;
- Replace main doors at Windsor Booster Station as follows:
 - o Replace two (2) 3' X 6' 8" metal doors;
 - o Repair block,
 - o Paint to match building;
- Replace roof on fluoride building
 - o Remove existing coal tar roof to structural concrete;
 - o Adhere 1/8" tapered system with approved adhesive;
 - o Adhere 1/4" sopraboard with approved adhesive;
 - o Cold apply or heat weld modified bitumen base sheet;
 - o Cold apply or heat weld modified bitumen cap sheet;
 - o All edge metal to be removed and replaced with 0.040" aluminum;
- Replace existing Sabre manual chlorine dioxide generator and feed system with similar type, size, and capacity unit
- Repair filters #17, #18, #19, #21, #22 and #26;
- Replace check valve on pump #3;

SIEMENS will provide parts, repairs and upgrades to the O.B. Curtis WTP as follows;

- Provide quarterly service/maintenance labor for twenty-four (24) months during the Construction Period for Trojan ultraviolet system as follows:
 - o Forty (40) hours on-site per quarterly visit to perform inspection and service of the system;
 - o Thirty-two (32) hours of emergency service with 48 hour response time,
 - o 24/7 telephone technical support;
- Replace raw water and pre-oxidation perimeter lights with similar materials;
- Replace door on walk-in HV switch gear;
- Install two (2) 2' x 6' sluice gates with grating modifications as needed to original rapid mix for isolation during maintenance,
- Repair and recoat Dryvit building exterior finishes as follows:
 - o Clean Dryvit on sludge building;
 - o Clean Dryvit, patch cracks and holes, and repair cornice on east side of chemical

- feed building;
 - o Clean coating on concrete, patch cracks and holes where coating delaminated at Influent pump station;
 - o Clean coating on concrete, patch cracks and holes in DryVit and coating on membrane building;
 - o Clean DryVit, clean coating on concrete, patch cracks and holes in DryVit and coating on filter building;
 - o Clean DryVit, recoat DryVit at sides and rear, recoat DryVit to wainscot band on front of administration/lab building;
 - o Clean coating on concrete foundation of high service pump building;
 - o Clean coating on concrete, patch cracks and holes where coating has delaminated on pre-oxidation basin;
- Replace sludge plant roof as follows:
 - o Install furring over existing shingle roof;
 - o Install metal roof with exposed fasteners;
 - o Color to match existing building;
- Replace existing 8,000 CFM dehumidification unit with new Dry-Air (or similar) packaged dehumidification system to include:
 - o Control panel;
 - o Rotor drive assembly;
 - o Outlet dampers;
 - o Structural skid mounted;
 - o Pre-wired with disconnect switch;
- Replace motor guards on High Service Pump #3;
- Replace motor guards on High Service Pump #4;
- Backwash Pump #11
 - o Replace two (2) motor guards;
 - o Replace vibration sensor;
- High Service Pump #2
 - o Replace expansion joint;
- High Service Pump #5
 - o Replace motor guards;
 - o Replace vibration sensor;
- Backwash Pump #2
 - o Replace vibration sensor;
 - o Replace two (2) motor guards;
- High Service Pump #10
 - o Replace vibration sensor;
 - o Replace two (2) motor guards;
- Install alternating board for filter gallery sump pumps;
- Install sixteen (16) 624U Watson Marlow (or similar) two-headed diaphragm pumps for lime, ACH, polymer, and caustic and install new controls in chemical feed building;
- Replace one (1) 3 HP, 3,450 RPM raw water pump for membrane pilot plant;
- Fabricate and install covers for membrane building air compressors;
- Inspect and perform miscellaneous repairs for all pH and turbidimeters as needed;
- Provide parts to replace reject actuator and solenoid in membrane building;
- Repair temperature meter on membrane tanks;
- Replace all collapsed hoses in membrane recovery feed system;
- Install two (2) new backup 2 HP sump pumps in chemical building;
- High Service Pump #8
 - o Replace bearings;
 - o Repair pump and 800 HP motor;
- Design and install gate valve to separate the two rapid mixers as follows:
 - o Cut and demolish existing asphalt;
 - o Install new forty-two inch (42") gate valve in existing pre-stressed pipe to include all fitting and evacuation shoring;
 - o Backfill and repair asphalt;
- Replace one (1) Philadelphia 15 HP back up mixer (or similar);

- Replace float for filter gallery sump pump;
- Miscellaneous SCADA additions
 - Read pH from SCADA system;
 - Program temperature display and trend output for raw water, high service water, and first tap;
- Inspect and clean out raw water line from intake to plant
 - Inspection and cleaning will be performed over a thirty (30) day period by professional divers to include clam removal, Before and after video will be provided.
- Repair Centrifuge #1 as follows:
 - Remove and ship to repair facility;
 - Disassemble, clean and inspect rotating assembly including gearbox;
 - Repair register fits for solid and liquid bowl hubs;
 - Repair feed zone liner and accelerator and replace surface erosion protection;
 - Replace conveyor tires as required;
 - Dynamically balance bowl and conveyor to ISO G1.0 tolerance;
 - Assemble conveyor with new bearings, seal and o-rings;
 - Assemble bowl hubs with new bearings, seal and o-rings;
 - Assemble gearbox with new bearings, seals and o-rings;
 - Replace rotor fasteners as required and paint bearing housings;
 - Perform four (4) hours function test;
 - Record vibration and bearing temperature readings;
 - Return shipping to CLIENT and re-install;
- During the Construction Period, provide twenty-four (24) months of service, training, and monitoring for membrane ultra filtration equipment to include:
 - Automated data collection and web-accessible, graphical reporting;
 - Bi-weekly review of data and communication of issues to CLIENT;
 - Provide a semi-annual management report with analysis of key trends and recommendations to improve plant operation, membrane cleaning and overall performance;
 - 24/7 emergency telephone technical support;
 - Three (3) site visits by a factory service representative for five (5) days or forty (40) hours, commencing 8:00 AM on a Monday until this time has elapsed.
- Provide one (1) set of ultrafilters to replace damaged and unusable inventory. SIEMENS to provide material only;
- Provide one (1) set of ultrafilters to replace damaged and unusable inventory
- Repair membrane color analyzer;
- Replace transfer pump for Membrane Manganese Analyzer;
- Replace reject valve for train #1;
- Repair fan on southeast compressor unit on membrane building roof;
- Replace chlorine dioxide system;
- Replace all eighteen (18) valves on the clarivac system;

SIEMENS will provide sewer collection line repairs at the below locations. This includes labor and material for a complete line repair as described. Asphalt repairs, erosion control, bypass pumping, select fill, traffic control, and fence removal/replacement are included on an as-needed basis.

- Wilshire Avenue
 - Remove and replace 600 linear feet of twenty-one inch (21") sewer line;
 - Remove and replace 400 linear feet of eighteen inch (18") sewer line;
 - Includes three (3) manholes;
 - Includes one (1) stream crossing;
- 300 Block of Rollingwood Drive
 - Remove and replace 1,140 linear feet of eight inch (8") and ten inch (10") sewer line;
 - Includes four (4) manholes;
 - Includes one (1) stream crossing;
- 2704 Quail Run at Eastover
 - Remove and replace 320 linear feet of twelve inch (12") sewer line;
- 2115 Robin Drive

- Remove and replace 1,125 linear feet of twelve inch (12") sewer line;
 - Includes six (6) manholes;
- 220 Dixon Road to I-220
 - Remove and replace 1,200 linear feet of twelve inch (12") sewer line;
 - Includes three (3) manholes;
- East Northside Drive
 - Relocate 500 linear feet of sewer line from side of street to middle of street from Eastwood Road to Culleywood Drive;
 - Includes two (2) manholes;
- Pearl Street
 - Remove and replace 260 linear feet of eight inch (8") sewer line;
 - Includes two (2) manholes;
 - Remove and replace 100 additional feet of (14") ductile iron pipe, connect to existing water line installed under allowance scope below and patch asphalt.
- 2234 West Highway 80
 - Repair of thirty inch (30") sewer line from Lynch Creek Interceptor at Hattiesburg Street going west to the north turn of line;
- McClure Road at Meadow Lane
 - Replace 2,250 linear feet of fifteen inch (15") sewer line;
 - Replace ten inch (10") sewer line with a fifteen inch (15") sewer line from intersection of Meadow Lane and Wildwood Terrace to South Sunset Terrace;
- 3838 Eastover Drive to 3900 Eastover Drive
 - Replace six inch (6") sewer line with eight inch (8") sewer line;
 - Includes five (5) manholes;
- Beasley Road to Meadow Road
 - Repair of thirty inch (30") sewer line;
 - Includes two (2) stream crossings and lining of pipe;
- 2212 Heritage Hill Drive
 - Remove and replace 400 linear feet of eight inch (8") sewer line;
 - Includes one (1) manhole;
- 5044 Wayneland Drive
 - Removal of 700 linear feet of six inch (6") sewer line;
 - Replace six inch (6") sewer line with eight inch (8") sewer line;
 - Includes two (2) manholes;
- South Drive/ Galvez Street to Jayna Avenue
 - Remove and replace 2,300 linear feet of twenty-one inch (21") sewer line;
 - Includes six (6) manholes;
 - Includes two (2) stream crossings;
- Liberty Street to Coleman Avenue
 - Remove and replace 60 linear feet of fifteen inch (15") sewer line;
 - Includes one (1) stream crossing.
- 1500 Block of Sheffield Drive
 - Repair 8" Sewer Line Collapse
- In addition to the aforementioned projects, Siemens will allocate \$2,327,292 in cost for the inclusion of additional sewer line projects to be selected during construction from the below list.
 - Pearl Street - install 300 linear feet of (14") ductile iron pipe 200 linear feet east of Parish Street to 165 linear feet west of Lamar Street
 - W McDowell Road near Hickory Drive - repair 305 linear feet of (8") sanitary sewer line
 - Beatty Street from Zhander Street to Allen Street - replace 250 linear feet of (8") sanitary sewer line
 - Pleasant Avenue from Gendate Street to Hull Street - install 200 linear feet of (12") sanitary sewer line

Exhibit A. Article J, Section 1.2.3 is added as follows

1.2.3 **Customer Care and Billing (CC&B) System Support Services and Automatic Metering System Support Services -Except as otherwise expressly provided herein. SIEMENS will provide all Equipment, material and labor to perform the following:**

SIEMENS will provide the following support services for the Customer Care Billing (CC&B) System and Automatic Metering System:

- SIEMENS shall engage its subcontractor Origin Consulting ("Origin") to supply additional services relative to the CC&B system. SIEMENS will engage Origin to remediate up to a maximum of 21,000 stranded bills (Track 1 -Stranded Bill Remediation); assess the CLIENT'S business operations (Track 2 -Business Operations Assessment); and gain insight into existing City technical issues (Track 3 -Technical Operations Assessment). SIEMENS estimates the term of Origin's engagement to be six (6) months to complete Track 1, 2 & 3. The components of the Work are listed below. The detailed services, deliverables, estimated schedule, clarifications, assumptions and exclusions are fully detailed in the attached Appendix A.
 - o Stranded bill remediation
 - o Business operations assessment
 - o Technical operations assessment
 - o onTrack Revenue software & license
- SIEMENS will provide meter services support via its subcontractor, Pedal Valve, Inc., providing a fulltime (5 day, 8 hour per day standard) Pedal Valve, Inc. (PVI) employee for a fixed six (6) month term. This resource is intended to augment and not replace CLIENT meter services activity. The components of the Work are listed below.
 - o Daily field activity support
 - o MiNet/CC&B alignment support
 - o CLIENT installed meter programming
 - o Meter mitigation support
- SIEMENS will provide AMI and MiNet services via its subcontractor, Mueller Systems, for a fixed six (6) month term. This resource is intended to augment and not replace CLIENT services activity. The components of the Work are listed below. The Mueller Systems detailed scope of services, service and license term, assumptions and clarifications are fully detailed in the attached Appendix B. Note: Per Appendix B CLIENT will obtain a 1 year license for use of Mueller's MLHost, AMI Software Module, Mi.Host Water Alerts Portal and 1 year Maintenance on Handheld PCs, Install Radios, MLHub Collectors & MLHub Maintenance Radios. Infrastructure and Mi.Node Service & Maintenance Plan shall expire after six (6) months.
 - o Software maintenance, hosting, and support
 - o Hardware maintenance and support
 - o Daily MiNet support
 - o Daily MiNode Maintenance
 - o Collector & repeater maintenance
- SIEMENS will provide project management oversight of its subcontractors, their activities, performance and schedule for a fixed six (6) month term.

Exhibit C, Article 1: Summary of Articles and Total Guaranteed Savings, Table 1.1—Total Guaranteed Savings (Units) is amended as follows:

Performance Period	Small Meter Billable Usage Increase [1] (CCF)	Large Meter Billable Usage Increase [2] (CCF)	Total
Construction	986,829	217,376	1,184,205
Annual Period 1	1,045,247	434,751	1,479,998
Annual Period 2	1,098,269	434,751	1,533,020
Annual Period 3	1,151,290	434,751	1,586,041
Annual Period 4	1,151,290	434,751	1,586,041
Annual Period 5	1,151,290	434,751	1,586,041
Annual Period 6	1,151,290	434,751	1,586,041
Annual Period 7	1,151,290	434,751	1,586,041
Annual Period 8	1,151,290	434,751	1,586,041
Annual Period 9	1,151,290	434,751	1,586,041
Annual Period 10	1,151,290	434,751	1,586,041
Annual Period 11	1,151,290	434,751	1,586,041
Annual Period 12	1,151,290	434,751	1,586,041
Annual Period 13	1,151,290	434,751	1,586,041
Annual Period 14	1,151,290	434,751	1,586,041
Annual Period 15	1,151,290	434,751	1,586,041
TOTALS	18,077,120	6,738,641	24,815,761

Exhibit C, Article 1: Summary of Articles and Total Guaranteed Savings, Table 1.2—Total Guaranteed Savings (Cost) is amended as follows:

Table 1.2 – Total Guaranteed Savings (Cost)					
Performance Period	Small Meter Billable Usage Increase \$	Large Meter Billable Usage Increase \$	Operational Savings \$	Deferred Maintenance Savings \$	Total Savings \$
Annual Period 0	\$2,309,957	\$501,802	\$503,750	-	\$3,315,509
Annual Period 1	\$2,529,702	\$1,003,604	\$2,015,200	\$1,654,389	\$7,202,895
Annual Period 2	\$2,657,333	\$1,003,604	\$2,075,656	\$1,654,389	\$7,390,983
Annual Period 3	\$2,784,965	\$1,003,604	\$2,137,926	\$1,654,389	\$7,580,884
Annual Period 4	\$2,784,965	\$1,003,604	\$2,202,063	\$1,654,389	\$7,645,021
Annual Period 5	\$2,784,965	\$1,003,604	\$2,268,125	\$1,654,389	\$7,711,083
Annual Period 6	\$2,784,965	\$1,003,604	\$2,336,169	\$1,654,389	\$7,779,127
Annual Period 7	\$2,784,965	\$1,003,604	\$2,406,254	\$1,654,389	\$7,849,212
Annual Period 8	\$2,784,965	\$1,003,604	\$2,478,442	\$1,654,389	\$7,921,400
Annual Period 9	\$2,784,965	\$1,003,604	\$2,552,795	\$1,654,389	\$7,995,753
Annual Period 10	\$2,784,965	\$1,003,604	\$2,629,379	\$1,654,389	\$8,072,337
Annual Period 11	\$2,784,965	\$1,003,604	\$2,708,260	\$1,654,389	\$8,151,218
Annual Period 12	\$2,784,965	\$1,003,604	\$2,789,508	\$1,654,389	\$8,232,466
Annual Period 13	\$2,784,965	\$1,003,604	\$2,873,193	\$1,654,389	\$8,316,151
Annual Period 14	\$2,784,965	\$1,003,604	\$2,959,389	\$1,654,389	\$8,402,347
Annual Period 15	\$2,784,965	\$1,003,604	\$3,048,171	\$1,654,389	\$8,491,129
TOTALS	\$43,701,532	\$15,555,862	\$37,984,280	\$24,815,641	\$122,057,515

Exhibit C, Article 2: Measurement and Verification Options, Table 2.1—Savings for First Annual Period by M&V Option is deleted in its entirety and replaced with the following revised Table 2.1:

FIM	Energy/Utility Savings \$			Operational Savings \$	Total Savings \$	Estimated Cost	Payback Years	Estimated Life of Measures
	Applicable M & V Options							
	A Retrofit Isolation: Key Parameter Measurement	E Stipulated	TOTAL Energy/Utility Savings	E Stipulated				
Automatic Metering System Upgrade	\$2,529,702	\$1,003,604	\$3,533,306	\$2,015,210	\$5,548,506	\$65,526,166	11.8	20
WTP and WWTP Repairs	-	-	-	\$1,654,389	\$1,654,389	\$24,274,101	14.7	15—equipment repairs 20—structural repairs 25—sewer line repairs
TOTALS	\$2,529,702	\$1,003,604	\$3,533,306	\$3,669,283	\$7,202,895	\$89,800,267	12.5	

Exhibit C, Article 2: Measurement and Verification Options, Table 2.2—Source of Operational Savings is amended as follows:

...

Table 2.2 - Source of Operational Savings				
Account/Vendor	Description	Annual Cost \$	# of Annual Periods Savings Are Applied	Annual Period Savings Begin
Manpower	Avoided future employment needs through elimination of new employee requirements	\$476,000	15	1
Reduction in City Vehicles	Fewer vehicles needed for meter reading	\$46,200	15	1
Reduction in Fuel Consumption	Less fuel consumed for meter reading	\$33,000	15	1
Manpower	Fewer re-reads and less work associated with meter reading	\$400,000	15	1
Meter/Lid Purchases	Less replacement meter/lid purchase requirements	\$240,000	15	1
Manpower	Less work associated with shutoffs/restore of service	\$800,000	15	1
Billing System Maintenance	Elimination of existing billing system maintenance expenditures	\$20,000	15	1
Construction Savings	Portion of the above items that will be achieved during the Construction Period	\$503,760	1	0
O&M Maintenance*	Avoided Deferred Maintenance costs associated with Water Treatment Plants and the City Sewer Collection System	\$1,654,389	15	1

*O&M Maintenance: Avoided Deferred Maintenance Annual Cost/Savings change from original contract is based on the same simple payback calculation as the original contract. The savings represent a simple payback of 14.7 years (cost/savings). "Deferred Maintenance" is defined in Article 2: Glossary of the Performance Contract Agreement.

Exhibit C, Article 5: Baseline Data, Table 5.1 -- Baseline Consumption for Automatic Meter System Upgrade FIM is amended as follows:

Year 1 - Annual Small Meter Revenue Calculations

Description	Existing Consumption at 100% Accuracy (CCF)	Existing Meter Accuracy %	Existing Consumption (CCF)	New Meter Accuracy %	Consumption Billed with New Meters (CCF)	Annual Consumption Increase (CCF)	Annual Consumption Increase (\$)
Water 5/8" Inside Group 1	1,302,737	86.10%	1,121,657	98.50%	1,283,196	161,539	\$400,618
Water 5/8" Inside Group 2	1,156,042	86.10%	995,362	98.50%	1,138,701	143,349	\$355,506
Water 5/8" Inside Group 3	789,985	86.10%	688,787	98.50%	787,986	99,198	\$246,011
Water 5/8" Inside Group 4	948,754	86.10%	816,878	98.50%	934,523	117,646	\$291,761
Water 5/8" Inside 1 Mile	251,309	86.10%	216,377	98.50%	247,539	31,162	\$154,565
Water 5/8" Outside 1 Mile	197,223	86.10%	169,809	98.50%	184,265	24,456	\$36,194
Water 1" Inside	485,573	92.40%	449,594	98.50%	479,275	29,681	\$73,609
Water 1" Inside 1 Mile	9,932	92.40%	9,177	98.50%	9,783	606	\$3,005
Water 1" Outside 1 Mile	8,585	92.40%	7,932	98.50%	8,456	524	\$775
Water 1.5" & 2" Inside	1,710,428	93.70%	1,602,672	98.50%	1,684,773	82,101	\$203,609
Water 1.5" & 2" Inside 1 Mile	9,006	93.70%	8,438	98.50%	8,871	432	\$2,144
Water 1.5" & 2" Outside 1 Mile	12,002	93.70%	11,246	98.50%	11,822	576	\$853
Sewer 5/8" Inside Group 1	657,756	86.10%	566,328	98.50%	647,889	81,562	\$175,358
Sewer 5/8" Inside Group 2	661,755	86.10%	569,771	98.50%	651,829	82,058	\$176,424
Sewer 5/8" Inside Group 3	446,787	86.10%	384,684	98.50%	440,085	55,402	\$119,113
Sewer 5/8" Inside Group 4	505,808	86.10%	435,500	98.50%	498,221	62,720	\$134,848
Sewer 5/8" Inside 1 Mile	5,843	86.10%	5,031	98.50%	5,756	725	\$1,558
Sewer 5/8" Outside 1 Mile	896	86.10%	771	98.50%	882	111	\$239
Sewer 1" Inside	200,773	92.40%	185,514	98.50%	197,761	12,247	\$26,331
Sewer 1" Inside 1 Mile	851	92.40%	787	98.50%	839	52	\$112
Sewer 1" Outside 1 Mile	0	92.40%	0	98.50%	0	0	\$0
Sewer 1.5" & 2" Inside	1,230,311	93.70%	1,152,801	98.50%	1,211,856	59,055	\$126,968
Sewer 1.5" & 2" Inside 1 Mile	971	93.70%	910	98.50%	956	47	\$100
Sewer 1.5" & 2" Outside 1 Mile	0	93.70%	0	98.50%	0	0	\$0
TOTALS	10,604,328		9,400,016		10,445,263	1,045,247	\$2,529,702

*Baseline has been modified due to changes in final stalled meter quantities as reflected in Exhibit A, Article 1, Section 2.1 of this Amendment 4 as well as by a two year shift in meter accuracy and consumption related to the Construction Period lasting two years beyond the completion date under the Agreement.

Exhibit C, Article 5: Baseline Data, Table 5.7 – Estimation of Existing Small Meter Accuracy over Project Term is amended as follows:

Description	Existing Small Meter Accuracy - Test Data							
	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Water 5/8" Inside Group 1	86.10%	86.10%	85.60%	85.10%	84.60%	84.10%	83.60%	83.10%
Water 5/8" Inside Group 2	86.10%	86.10%	85.60%	85.10%	84.60%	84.10%	83.60%	83.10%
Water 5/8" Inside Group 3	86.10%	86.10%	85.60%	85.10%	84.60%	84.10%	83.60%	83.10%
Water 5/8" Inside Group 4	86.10%	86.10%	85.60%	85.10%	84.60%	84.10%	83.60%	83.10%
Water 5/8" Inside 1 Mile	86.10%	86.10%	85.60%	85.10%	84.60%	84.10%	83.60%	83.10%
Water 5/8" Outside 1 Mile	86.10%	86.10%	85.60%	85.10%	84.60%	84.10%	83.60%	83.10%
Water 1" Inside	92.40%	92.40%	91.90%	91.40%	90.90%	90.40%	89.90%	89.40%
Water 1" Inside 1 Mile	92.40%	92.40%	91.90%	91.40%	90.90%	90.40%	89.90%	89.40%
Water 1" Outside 1 Mile	92.40%	92.40%	91.90%	91.40%	90.90%	90.40%	89.90%	89.40%
Water 1.5" & 2" Inside	93.70%	93.70%	93.20%	92.70%	92.20%	91.70%	91.20%	90.70%
Water 1.5" & 2" Inside 1 Mile	93.70%	93.70%	93.20%	92.70%	92.20%	91.70%	91.20%	90.70%
Water 1.5" & 2" Outside 1 Mile	93.70%	93.70%	93.20%	92.70%	92.20%	91.70%	91.20%	90.70%
Sewer 5/8" Inside Group 1	86.10%	86.10%	85.60%	85.10%	84.60%	84.10%	83.60%	83.10%
Sewer 5/8" Inside Group 2	86.10%	86.10%	85.60%	85.10%	84.60%	84.10%	83.60%	83.10%
Sewer 5/8" Inside Group 3	86.10%	86.10%	85.60%	85.10%	84.60%	84.10%	83.60%	83.10%
Sewer 5/8" Inside Group 4	86.10%	86.10%	85.60%	85.10%	84.60%	84.10%	83.60%	83.10%
Sewer 5/8" Inside 1 Mile	86.10%	86.10%	85.60%	85.10%	84.60%	84.10%	83.60%	83.10%
Sewer 5/8" Outside 1 Mile	86.10%	86.10%	85.60%	85.10%	84.60%	84.10%	83.60%	83.10%
Sewer 1" Inside	92.40%	92.40%	91.90%	91.40%	90.90%	90.40%	89.90%	89.40%
Sewer 1" Inside 1 Mile	92.40%	92.40%	91.90%	91.40%	90.90%	90.40%	89.90%	89.40%
Sewer 1" Outside 1 Mile	92.40%	92.40%	91.90%	91.40%	90.90%	90.40%	89.90%	89.40%
Sewer 1.5" & 2" Inside	93.70%	93.70%	93.20%	92.70%	92.20%	91.70%	91.20%	90.70%
Sewer 1.5" & 2" Inside 1 Mile	93.70%	93.70%	93.20%	92.70%	92.20%	91.70%	91.20%	90.70%
Sewer 1.5" & 2" Outside 1 Mile	93.70%	93.70%	93.20%	92.70%	92.20%	91.70%	91.20%	90.70%

Description	Existing Small Meter Accuracy - Test Data							
	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
Water 5/8" Inside Group 1	82.60%	82.10%	81.60%	81.10%	80.60%	80.10%	79.60%	79.10%
Water 5/8" Inside Group 2	82.60%	82.10%	81.60%	81.10%	80.60%	80.10%	79.60%	79.10%
Water 5/8" Inside Group 3	82.60%	82.10%	81.60%	81.10%	80.60%	80.10%	79.60%	79.10%
Water 5/8" Inside Group 4	82.60%	82.10%	81.60%	81.10%	80.60%	80.10%	79.60%	79.10%
Water 5/8" Inside 1 Mile	82.60%	82.10%	81.60%	81.10%	80.60%	80.10%	79.60%	79.10%
Water 5/8" Outside 1 Mile	82.60%	82.10%	81.60%	81.10%	80.60%	80.10%	79.60%	79.10%
Water 1" Inside	88.90%	88.40%	87.90%	87.40%	86.90%	86.40%	85.90%	85.40%
Water 1" Inside 1 Mile	88.90%	88.40%	87.90%	87.40%	86.90%	86.40%	85.90%	85.40%
Water 1" Outside 1 Mile	88.90%	88.40%	87.90%	87.40%	86.90%	86.40%	85.90%	85.40%
Water 1.5" & 2" Inside	90.20%	89.70%	89.20%	88.70%	88.20%	87.70%	87.20%	86.70%
Water 1.5" & 2" Inside 1 Mile	90.20%	89.70%	89.20%	88.70%	88.20%	87.70%	87.20%	86.70%
Water 1.5" & 2" Outside 1 Mile	90.20%	89.70%	89.20%	88.70%	88.20%	87.70%	87.20%	86.70%
Sewer 5/8" Inside Group 1	82.60%	82.10%	81.60%	81.10%	80.60%	80.10%	79.60%	79.10%
Sewer 5/8" Inside Group 2	82.60%	82.10%	81.60%	81.10%	80.60%	80.10%	79.60%	79.10%
Sewer 5/8" Inside Group 3	82.60%	82.10%	81.60%	81.10%	80.60%	80.10%	79.60%	79.10%
Sewer 5/8" Inside Group 4	82.60%	82.10%	81.60%	81.10%	80.60%	80.10%	79.60%	79.10%
Sewer 5/8" Inside 1 Mile	82.60%	82.10%	81.60%	81.10%	80.60%	80.10%	79.60%	79.10%
Sewer 5/8" Outside 1 Mile	82.60%	82.10%	81.60%	81.10%	80.60%	80.10%	79.60%	79.10%
Sewer 1" Inside	88.90%	88.40%	87.90%	87.40%	86.90%	86.40%	85.90%	85.40%
Sewer 1" Inside 1 Mile	88.90%	88.40%	87.90%	87.40%	86.90%	86.40%	85.90%	85.40%
Sewer 1" Outside 1 Mile	88.90%	88.40%	87.90%	87.40%	86.90%	86.40%	85.90%	85.40%
Sewer 1.5" & 2" Inside	90.20%	89.70%	89.20%	88.70%	88.20%	87.70%	87.20%	86.70%
Sewer 1.5" & 2" Inside 1 Mile	90.20%	89.70%	89.20%	88.70%	88.20%	87.70%	87.20%	86.70%
Sewer 1.5" & 2" Outside 1 Mile	90.20%	89.70%	89.20%	88.70%	88.20%	87.70%	87.20%	86.70%

*Baseline has been modified due to changes in final stalled meter quantities as reflected in Exhibit A, Article 1, Section 2.1 of this Amendment 4 as well as by a two year shift in meter accuracy and consumption related to the Construction Period lasting two years beyond the completion date under the Agreement.

Exhibit C, Article 5: Baseline Data, Table 7.2 – Guaranteed Small Meter Accuracy during Performance Guarantee Period is amended as follows:

Description	Small Meter Accuracy - Guaranteed Values							
	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Water 5/8" Inside Group 1	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%	97.00%	96.50%
Water 5/8" Inside Group 2	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%	97.00%	96.50%
Water 5/8" Inside Group 3	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%	97.00%	96.50%
Water 5/8" Inside Group 4	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%	97.00%	96.50%
Water 5/8" Inside 1 Mile	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%	97.00%	96.50%
Water 5/8" Outside 1 Mile	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%	97.00%	96.50%
Water 1" Inside	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%	97.00%	96.50%
Water 1" Inside 1 Mile	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%	97.00%	96.50%
Water 1" Outside 1 Mile	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%	97.00%	96.50%
Water 1.5" & 2" Inside	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%	97.00%	96.50%
Water 1.5" & 2" Inside 1 Mile	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%	97.00%	96.50%
Water 1.5" & 2" Outside 1 Mile	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%	97.00%	96.50%
Sewer 5/8" Inside Group 1	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%	97.00%	96.50%
Sewer 5/8" Inside Group 2	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%	97.00%	96.50%
Sewer 5/8" Inside Group 3	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%	97.00%	96.50%
Sewer 5/8" Inside Group 4	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%	97.00%	96.50%
Sewer 5/8" Inside 1 Mile	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%	97.00%	96.50%
Sewer 5/8" Outside 1 Mile	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%	97.00%	96.50%
Sewer 1" Inside	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%	97.00%	96.50%
Sewer 1" Inside 1 Mile	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%	97.00%	96.50%
Sewer 1" Outside 1 Mile	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%	97.00%	96.50%
Sewer 1.5" & 2" Inside	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%	97.00%	96.50%
Sewer 1.5" & 2" Inside 1 Mile	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%	97.00%	96.50%
Sewer 1.5" & 2" Outside 1 Mile	98.50%	98.50%	98.50%	98.50%	98.00%	97.50%	97.00%	96.50%

Description	Small Meter Accuracy - Guaranteed Values							
	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
Water 5/8" Inside Group 1	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%	93.00%	92.50%
Water 5/8" Inside Group 2	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%	93.00%	92.50%
Water 5/8" Inside Group 3	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%	93.00%	92.50%
Water 5/8" Inside Group 4	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%	93.00%	92.50%
Water 5/8" Inside 1 Mile	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%	93.00%	92.50%
Water 5/8" Outside 1 Mile	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%	93.00%	92.50%
Water 1" Inside	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%	93.00%	92.50%
Water 1" Inside 1 Mile	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%	93.00%	92.50%
Water 1" Outside 1 Mile	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%	93.00%	92.50%
Water 1.5" & 2" Inside	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%	93.00%	92.50%
Water 1.5" & 2" Inside 1 Mile	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%	93.00%	92.50%
Water 1.5" & 2" Outside 1 Mile	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%	93.00%	92.50%
Sewer 5/8" Inside Group 1	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%	93.00%	92.50%
Sewer 5/8" Inside Group 2	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%	93.00%	92.50%
Sewer 5/8" Inside Group 3	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%	93.00%	92.50%
Sewer 5/8" Inside Group 4	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%	93.00%	92.50%
Sewer 5/8" Inside 1 Mile	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%	93.00%	92.50%
Sewer 5/8" Outside 1 Mile	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%	93.00%	92.50%
Sewer 1" Inside	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%	93.00%	92.50%
Sewer 1" Inside 1 Mile	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%	93.00%	92.50%
Sewer 1" Outside 1 Mile	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%	93.00%	92.50%
Sewer 1.5" & 2" Inside	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%	93.00%	92.50%
Sewer 1.5" & 2" Inside 1 Mile	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%	93.00%	92.50%
Sewer 1.5" & 2" Outside 1 Mile	96.00%	95.50%	95.00%	94.50%	94.00%	93.50%	93.00%	92.50%

*Baseline has been modified due to changes in final stalled meter quantities as reflected in Exhibit A, Article 1, Section 2.1 of this Amendment 4 as well as by a two year shift in meter accuracy and consumption related to the Construction Period lasting two years beyond the completion date under the Agreement.

All other provisions of the Agreement not specifically amended herein shall remain in full force and effect.

IN WITNESS THEREOF, this Amendment No.4 has been duly executed by the parties hereto, this 13 day of June, 2018.

Agreed for City of Jackson, Mississippi
(Signature) by: Chokwe Antar Lumumba ^{H40}
Chokwe Antar Lumumba, Mayor

City Clerk Attest:

Kristi Moore

Agreed for Siemens Industry, Inc.
(Signature) by: Peter Kamps ^{Peter Kamps}
Print Name and Title: Vice President
(Signature) by: [Signature] ^{Finance & Business Administration}
Print Name and Title: Richard Rodriguez, Sr. Dir. BPS

Approved By Legal

M.E. Bouchard
Marc E. Bouchard

Allyson H. Brown
Attorney at Law
1000 15th Street, NW
Washington, DC 20004

Allyson H. Brown

Attorney at Law

Amendment NO.4, Appendix A: Scope of Work to be
Executed by Siemens and its Subcontractor Origin Consulting
for Stranded Bill Remediation, Business Operations
Assessment and Technical Operations Assessment

INTRODUCTION

The performance of the Work pursuant to this document shall be governed by and subject to the terms and conditions set forth in the Proposal for Alternate Work Scope dated March 23, 2018 and in the Performance Contracting Agreement and all Amendments to the Performance Contracting Agreement.

Overview & Background

In September 2015, the City of Jackson (COJ) went live with new Meter-to-Cash software, Oracle's Customer Care & Billing (CC&B) and Mueller Systems' Mi.Net and Mi.Host metering applications. In the months after the initial software stabilization was complete, the number of operational exceptions (captured as "To Do's" in CC&B) began to grow. Many of these exceptions resulted in a bill not being delivered to the customer, and the account becoming "stranded." By September 2016, COJ had accumulated approximately 15,000 stranded accounts. At the City's request and Siemens' expense, Origin embarked on an effort to bring those 15,000 accounts current, and to perform a Meter-to-Cash assessment to identify root causes and recommended actions to prevent future stranded bills. The stranded bill recovery effort and the Meter-to-Cash assessment were both completed by October 2016. At the conclusion of the stranded bill recovery effort, over \$11,000,000 of stranded bills were remedied and billed and the City was positioned for operational sustainability moving forward.

In February 2018, The City contacted Siemens and the following observations were made:

- The number of stranded accounts has grown significantly
- The nightly CC&B batch billing process run time has increased by several hours and at times leads to missing bill print deadlines
- The recommended actions outlined in Origin's Meter-to-Cash Assessment (which closely paralleled actions outlined in the earlier City commissioned Raftelis report) are not believed to be fully implemented

As of March 5th, 2018, the City's CC&B billing system has approximately 20,500 bills that are stranded with an impact of an estimated \$19 Million dollars of unbilled revenue. It is believed that the root cause of the stranded bills may be attributed to the same poorly-performing business processes noted in 2016. Siemens desires to see the City of Jackson be successful in their water and wastewater operations. Siemens, with the assistance of its subcontractor Origin Consulting (Origin), has developed this scope of Work to define a set of measures to deliver immediate as well as sustainable improvements to operations.

Term

The term of this engagement is estimated to be six months. The estimated start date is April 16th, 2018.

Project Scope and Approach

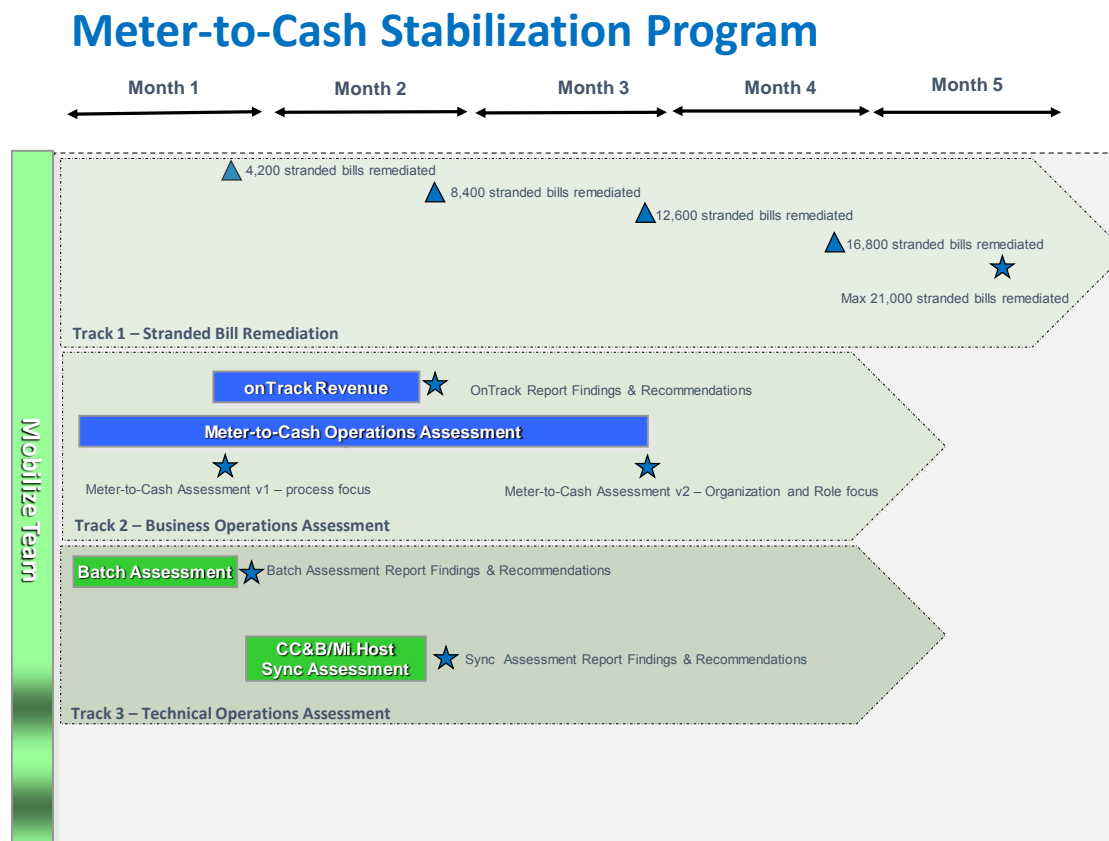
Stabilization of the City of Jackson's Meter-to-Cash operations cannot be accomplished with a single effort. To solve for the City's most immediate and urgent objectives, Origin has developed a stabilization program comprised of three separate project tracks focused on the City of Jackson specific needs. Each track is related and, while not dependent on each other, integrated in a manner to help the City restore stability across the entire business solution. Origin will provide resources to execute each of these tracks as well as an overall Program Manager to ensure synergy across the program.

The table below provides a summary of the key objectives per track.

Track #	Track Name	Key Objectives
1	Stranded Bill Remediation	<ul style="list-style-type: none"> • Address issues preventing bills from processing. • Identify and document root causes of stranded bills. • Develop recommendations to prevent future stranded bills. • Remediate a maximum of 21,000 stranded bills
2	Business Operations Assessment	<ul style="list-style-type: none"> • Highlight new trouble spots resulting in sub-optimal Meter to Cash operations e.g. Start/Stop accounts billing issue. • Identify poorly performing business processes and recommended improvements. • Evaluate organizations and roles for operational fitness. • Identify additional revenue risks and conditions similar to stranded bills and define recommendations to mitigate risks.

3	Technical Operations Assessment	<ul style="list-style-type: none"> Identify issues impacting nightly batch billing performance and define recommendations for improvement. Evaluate CC&B application and related infrastructure patch levels, patching strategy, and develop remediation plans. Evaluate CC&B and Mueller software data synchronization health and develop recommendations for any out-of-sync conditions. Review procedures for identifying and working data sync issues.
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Meter-to-Cash Stabilization Program Timeline



Track 1 – Stranded Bill Remediation

To address the most urgent concern, addressing the issues impacting all stranded bills at project commencement Siemens, subcontracting to Origin, will mobilize a team to perform the following activities:

1. Review accounts not billed.
2. Identify issues preventing billing completion.
3. Correct issues (To-Dos) preventing the accounts from billing (which may be dependent on information from the City, see assumptions section).
 - a. Create payment arrangements that will be reflected on upcoming bills for accounts with stranded bills that meet predefined criteria.
4. Identify and document root causes (system, process, and execution) of top generated billing errors for inclusion in the Operational Assessment in Track 2 below.

Reporting on the status of bill clearing and associated To-Do cleanup will be performed as indicated below.

Weekly:

- The number of stranded accounts remaining per week.
- A list of accounts, per week, that are cleared along with issue/cause.
- Amount of Revenue that is generated by released bills and anticipated revenue for remaining bills.

Monthly

- Verification metrics to confirm that the corrected accounts actually billed. Accounts not billed in the following month after the cleanup will be highlighted and explained.

Origin has developed an estimate for this track based on upon Origin's estimating models and experience delivering similar projects in the Utility industry. Additionally, the processes, procedures, and lessons learned from the 2016 Stranded Bill Remediation effort for the City of Jackson have been factored into the estimates for this effort. Based on this data, with a team of 6 FTEs Origin estimates a bill remediation rate of 4200 per month. At this rate, Origin estimates it may clear up to a maximum of 21,000 in approximately 5 months with the following assumptions:

- An expected growth rate of up to 90 stranded bills per month

- Note: If the actual stranded bills growth rate exceeds this estimated growth rate, then it will be necessary to convene a meeting with The City to determine the best course of action.
- COJ will continue to process ToDos created after project commencement at a rate that will ensure that there isn't an increase in the backlog of stranded bills greater than the estimated growth rate. This is a normal operational expectation since the City will not be using resources to clear ToDos related to stranded bills Included In the Siemens remediation Initiative.

Track 2 – Business Operations Assessment

Siemens, subcontracting to Origin, will perform this assessment across two landscapes – Business Process and Business Data. The business process flows warrant significant evaluation, both within and across departments. In order for the business processes to be effective, they must be well aligned to the software application configuration in CC&B and Mi.Host, and executed consistently by the City staff. This level of alignment can often be measured by a deep evaluation of the business data within the applications.

- Business Process: Origin will review the business solution and its use within and across the City departments. Using Origin's 2016 Meter-to-Cash Assessment report as an initial guide, our team will follow end-to-end business processes and evaluate any new policies, processes, or procedures that have been introduced since the 2016 report was produced. Origin will then combine these findings with inputs provided from the Stranded Bill track to prepare a comprehensive report that documents observations, concerns, and recommendations to improve poorly performing business processes, organizations, and roles .
- Business Data – Origin will evaluate the City's Meter-to-Cash data using a set of expert analytics tools known as onTrack. Origin's onTrack analytics tools evaluate application data to identify anomalies that may lead to a loss in revenue. These analytics and data anomalies help identify application areas and business processes that require remediation to prevent additional revenue loss.

At the conclusion of this assessment, Siemens will provide the City of Jackson with a consolidated and comprehensive report authored by Origin that provides the following:

- Observations – a review of the use of CC&B and associated processes.
- Specific challenges – identification of specific instances where departmental behaviors are not aligned with prescribed recommended CC&B configuration and/or supporting business processes.

- Specific improvements – remedies for each identified challenge that can significantly improve efficiency or performance within that department.

Track 3 – Technical Operations Assessment

In parallel to the launch of the Stranded Bill Remediation track, Siemens, subcontracting to Origin, will kick-off a technical discovery effort to gain insights into any technical issues that may be contributing to increasing Batch processing run times and related operational issues. To perform this effort, Origin will perform the assessment across three perspectives:

- Batch Processing Assessment: A deep dive to identify probable root causes that may be impacting nightly batch run times.
- CC&B/Mi.Host Sync Assessment: A review of data shared between the two applications focused on identification of any out-of-sync conditions that may exist and exacerbate operational issues and generate additional To-Dos.

At the conclusion of this assessment, Siemens will provide the City of Jackson with the following generated through Origin's engagement:

- Observations – a review of the CC&B batch job run times and overall database health.
- Specific challenges – identification of any specific problem conditions.
- Specific improvements – remedies for each identified challenge that can improve system performance or help remedy operational issues.

Key Milestone Summary:

The milestone dates below assume a project start date of April 16th, 2018.

Month 1

1. Track 1 - Stranded Bill Remediation: 4,200 Total Stranded Bills Remediated
2. Track 2 - Business Operations Assessment: Meter-to-Cash Assessment v1
3. Track 3 – Technical Operations Assessment: Batch Assessment Report Findings and Recommendations

Month 2

1. Track 1 - Stranded Bill Remediation: 8,400 Total Stranded Bills Remediated

2. Track 2 - Business Operations Assessment: OnTrack Report Findings and Recommendations
3. Track 3 – Technical Operations Assessment: CC&B/Mi.Host Sync Assessment Report Findings and Recommendations

Month 3

1. Track 1 - Stranded Bill Remediation: 12,600 Total Stranded Bills Remediated
2. Track 2 - Business Operations Assessment: Meter-to-Cash Assessment v2

Month 4

1. Track 1 - Stranded Bill Remediation: 16,800 Total Stranded Bills Remediated

Month 5

1. Track 1 - Stranded Bill Remediation: Up to 21,000 Total Stranded Bills Remediated

Change Control Process

Any request for changes to the items detailed into this scope of work must be in writing; this includes requests for changes in scope, specifications, schedule, designs, requirements, service deliverables, timeline or any other aspect of this scope of work. Neither party shall be obligated to perform tasks related to changes in time, scope, cost, or contractual obligations until Siemens and The City agree in writing to the proposed change(s) amending this scope of work.

Assumptions, Clarifications and Exclusions

- Siemens and its subcontractor Origin will provide project management and industry expertise specifically related to and sufficient to complete the scope of work detailed herein.
- Some stranded or unbilled accounts may require additional information from the City, Siemens assumes the City will provide the required information within 5 days of the request made by Siemens or its subcontractor Origin. Any delays in receiving City information could result in schedule delays or cost overruns.
- The City will provide policy guidelines for bill clearing and release. These policies will include the number of months to bill, any revenue forgiveness due to past issues and delayed billings. Initially, all bills will be generated but will contain the 'bill intercept' indicator, which means CC&B will generate a bill for the account, the bill will be included in the Utilitec review batch that requires the City to

release the bills for printing. The City may select to set a threshold for the bill intercepts – i.e. set intercept indicator if the bill amount is greater than \$100. Origin will also include a list of accounts, the bill amount and the number of months billed on a daily basis, which can be verified against the Utilitec intercept file. Note: These bills will be printed as soon as the City authorizes Utilitec to proceed.

- Siemens and its subcontractor Origin will require additional information from the City during this process, to help troubleshoot some issues. City will provide Origin and Siemens with a designated contact person(s) to respond to requests for information or support. Origin or Siemens will provide a list of requirements & information needed to the City on a daily basis. An example is where accounts have pending fieldwork, which is preventing the account from being billed. Origin will utilize Mi.Host to clear as many of these as possible, but expects there will be cases where the City would need to complete pending fieldwork before the accounts can be billed. Origin will provide a list of these accounts on a daily basis and require the City to complete the fieldwork within 15 business days of receiving the information so that Origin can bill the account.
- Once the unbilled accounts have been fixed, they will be run through the nightly billing process, sent to Utilitec and produce a bill the following business day.
- Siemens and its subcontractor Origin cannot guarantee the account will bill the following month as the City may not complete business processes or the City may inadvertently cause the account to become unbillable again. Origin can confirm that the current issues preventing the account from being billed will be fixed to allow the account to be billed, therefore removing the cause for future billing cycles.
- Siemens is not accountable for any accounts that are pending City action or accounts that have unanswered requests for information or a request to complete activities outside of Siemens or its subcontractor Origin's ability (e.g. fieldwork).
- The City will provide Origin and/or Siemens with access necessary to perform remediation and operational assessment activities.
- This work effort will be primarily performed remotely with occasional on-site sessions at the City of Jackson's offices as necessary.
- This proposal assumes a total stranded bill volume up to a maximum of 21,000 bills. At the time of development of this proposal In mid March 2018 there were approximately 20,500 stranded bills; an additional 500 stranded bills will be covered In the event the total Increases prior to or after the start of work.

Amendment NO.4, Appendix B: Scope of Work to be Executed by Siemens and its Subcontractor Mueller Systems for AMI and Mi.Net Services

Overview

Siemens will subcontract with Mueller Systems to provide certain software licenses, hardware maintenance, AMI and Mi.Net support services to the City. Mueller Systems will provide timely response to network issues (collectors & repeaters) as well as routinely troubleshooting and/or replacing any endpoint (Mi.Node) issues in the field. The work will be done by Mueller Systems employees who will be able to respond with *on-site, same-day* support for problems. The Mueller work will have two main priorities:

1. Timely response to any collector or repeater issues. Once an issue is identified, Mueller will provide a response within 2 hours. If the issue needs on-site support, we will have staff at the site within 8 hours. Depending on the issues found, we will attempt to remedy all issues within 1 to 5 business days.
2. Routinely maintain the Mi.Node endpoints in the field. Mueller's local staff will utilize the tools within Mi.Net to identify any endpoints which are not reporting within expectations. Mueller staff will visit these nodes in the field and provide any troubleshooting necessary up to and including Mi.Node replacement, if needed. Mueller will not remove, replace or install water meters.

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Licenses and Hardware Maintenance

The current Mueller Systems End User License Agreement that has been provided to The City through Siemens is a Utility Owned (Non-Hosted) Maintenance and Support Agreement. This is Mueller's standard agreement for non-hosted systems and provides The City with basic software maintenance and support as described in the agreement and chart below. Additionally, we will provide the City with hardware maintenance agreements (extended warranty coverage) for collectors and handheld computers in accordance with the chart below. The Proposal for Alternate Work Scope also provides for six months of infrastructure and Mi.Node service and maintenance as shown in the chart below.

Utility Owned (Non-Hosted) Annual Software Maintenance and Support

<u>Item</u>	<u>Quantity</u>	<u>Term in Months</u>
Mi.Host AMI Software Module <i>for Water System</i> (Up to 100,000 meters)	1	12
Mi.Host Water Alerts Portal (Up to 100,000 meters)	1	12

Hardware Maintenance Plan

<u>Item</u>	<u>Quantity</u>	<u>Term in Months</u>
Handheld PC & Install Radio – ea.	11*	12
Mi.Hub Collector – ea.	43**	12
Mi.mHub Maintenance Radio – ea.	6*	12

*Based on shipments

**Based on current network status

Infrastructure and Mi.Node Service and Maintenance Plan

<u>Item</u>	<u>Quantity</u>	<u>Term in Months</u>
Appendix E – Extended Infrastructure and Mi.Node Service and Maintenance Plan	1	6

Additional Offer for Hosted Service

Since the City has elected to work with Siemens and its subcontractor Mueller Systems for the additional services described above, Siemens and Mueller Systems can also offer the City the option to upgrade to a hosted software service at no additional charge by bundling the plans together for the six month term of the scope of work. Data hosting and support services are generally offered to customers at an increased cost (over the non-hosted service agreement) to account for the data storage requirements and additional resources devoted by our NOC team. Data hosting will provide The City with secure data storage and access to Mi.Host, without the worry of server upgrades, interruption of service due to ISPs, catastrophic loss of data, etc. It will also allow Mueller to continue to manage and cover the cost of the data plans between AT&T and the Mi.Hub collectors and allow our NOC staff to be engaged with additional trouble-shooting tools for faster response times and increased service levels.

Additional Details for Mueller Scope from Mueller Documentation**Services****1. Software Services and Support Obligations (Online Software and Licensed Software)**

a. “Update” to the Software means a subsequent release of the Software that Provider makes generally available to its current customers for the Software. Updates include changes and corrections to the Software as are required to keep the Software in substantial conformance with the applicable Documentation and that are created by Provider as corrections for defects in the Software. Updates shall not include any release, option or future product that Provider licenses separately. Provider shall in its sole discretion determine the nature, content, timing and release of any Updates.

b. Web-based support, consisting of information on the most current release of the Software through Provider’s web site.

c. Phone support in the form of advice and counsel via telephone regarding Customer’s use of the most current release of the Software, as well as Customer’s connectivity and ability to access Content. Phone Support shall be provided from 8:00 AM to 5:00 PM (Eastern Standard Time), Monday through Friday, exclusive of holidays observed by Provider.

2. Software Hosting Services (Online Software ONLY)

a. Except as specifically permitted in this Agreement, Customer shall have web-based access the Software hosted by Provider pursuant to this Agreement.

b. Provider shall provide Customer with access and related hosting services to the Software installed on Provider’s servers. Provider will also install the Content provided by Customer. Provider will define the appropriate performance specifications and will host the server at a Provider’s location. Provider will monitor and perform routine maintenance on the server, and if the server is not operating properly, will make a good faith effort to operate Customer’s system on a backup server, if available. Access to Customer’s server is restricted to authorized Provider information technology and support personnel only. Differential and full server backups are performed when reasonably practicable.

c. Customer shall be responsible for installing, operating and maintaining the equipment, software, and/or facilities at Customer location recommended by Provider for effective access to and use of the Software installed on Mueller Systems server. Customer shall be responsible for providing and maintaining its own Internet access and all necessary telecommunications equipment at Customer’s location necessary for accessing the Software.

**Extended Infrastructure and Mi.Node Service and Maintenance Plan
(Collectors/Repeaters)**

Overview

NOTE: If any failure is due to acts beyond the control of Mueller Systems, e.g. acts of God, or third party intentional or willful misconduct, upon notification by Customer and acceptance by Mueller Systems of such failure, Mueller Systems will use commercially reasonable efforts to address such failure at the then-current part and service fees. Such fees shall be in addition to any previously-paid maintenance fees.

Summary of the service level commitment provided by Mueller Systems is as follows:

- 100% reporting of all and accepted infrastructure devices covered
- Acknowledgement and response of all service requests within 2 hours
- Local troubleshooting with 8 hours if required
- Problem resolution of most requests within 3 to 5 business days
- Management of spare equipment to targeted stock levels

Assumptions

Single Point of Contact (SPOC): Customer will provide Mueller Systems with a single point of contact for notification and communications relating to the assets covered by this plan. This SPOC will be responsible for the coordination of activities and responsibilities assigned to customer.

Access: Customer will arrange for timely access to all assets covered under this plan. Customer will coordinate access to any assets installed on third party sites, and ensure access to locked gates, buildings, or any area that a network asset is installed which may require special considerations to service. If requested by Mueller Systems, customer will make attempts to arrange for safe access to assets through local law enforcement, etc.

Covered Assets: Covered assets are defined as Mi.Hub XR collectors, Mi.Hub XR-R collectors, and repeaters installed as part of this project. Pricing is outlined in Appendix D and valid for the installed infrastructure devices (collectors and repeaters) listed in a formal propagation study developed by Mueller Systems as the first step in the execution of this plan.

Stock: Mueller Systems will maintain 5% stock levels on all required parts for maintenance of network devices (such as DCXR Repeaters), and a minimum of one (1) Mi.Hub XR collectors and three (3) Mi.Hub XR-R collectors. Mueller Systems will maintain stock in a secure location in or around the city of Jackson in accordance with the bailment agreement attached hereto. Inventory will be available for audit upon request by Customer.

AMI tasks included in the fee:

- Troubleshooting and replacement of existing Collectors and Repeaters
- Removal / Decommissioning
- Battery Exchange in collectors
- Quarterly reporting – format to be mutually agreed upon
- Traffic control

AMI equipment tasks not included in the fee but price quotation provided following agreed upon scope and site survey:

- Relocate Collector and Repeater

Infrastructure Troubleshooting Steps: Hosted Environment

Mueller Systems will respond to all customer generated service requests within two (2) hours. If local troubleshooting is required, Mueller Systems personnel will be onsite within eight (8) business hours. Mueller Systems will attempt to resolve all service requests within 3 to 5 business days, and if such service request cannot be so resolved, Mueller Systems will provide Customer with daily updates and action plans until the service request is resolved. Work above 50 feet (XR-R applications) may take longer than 5 business days but no more than 10 business days.

Step 1: Notification of Outage

Mueller Systems Network Operations Center (NOC) will notify Customer's SPOC of the potential outage condition. A ticket will be opened with the Mueller Systems operations center from tracking the incident and the ticket number will be provided to the Customer SPOC for tracking.

In the event Customer would need to alert Mueller Systems of a potential outage (i.e. physical damage, vandalism, etc.); reporting will be done through the Mueller Systems NOC. Mueller Systems will open a ticket for the incident, and future communications on the issue will be through the Customer SPOC.

Step 2: Remote Troubleshooting

In reaction to suspected outage, Mueller Systems NOC will perform corrective actions to attempt to recover the outage. This will include:

- (1) Troubleshooting and restoration attempts on the cellular backhaul connection (which will including working directly with third party provides such as AT&T)
- (2) Remote Reboot (if the Mi.Hub is responsive on the cellular backhaul)
- (3) Additional troubleshooting steps as required attempting to determine root cause of the outage.

In the event remote troubleshooting does not remedy the outage, Mueller Systems will arrive onsite and coordinate with NOC personal to troubleshoot. If there is no power present at the electrical connection to the Hub, Mueller Systems will refer the outage back to the customer so that power can be restored by the local electrical provider. The incident investigation will be suspended for further investigation until power is restored and customer notifies NOC.

The issue may also be with the cellular provider or with other aspects on the backhaul connection. If local troubleshooting reveals no outright issues with the Mi.Hub device and escalation is required by Mueller Systems to its third party vendors, a second visit may be required before additional technicians are dispatched.

All actions taken will be logged in the Mueller Systems troubleshooting ticket and included in a final incident report.

Step 3: Technician Dispatch for On-Site Troubleshooting or Replacement

Mueller Systems, or its trained subcontractor, will be dispatched to the site for any outage that cannot be remedied through previous Steps troubleshooting. Mueller Systems will coordinate with the Customer SPOC to occur during normal business hours Monday through Friday 8am to 5pm. The onsite technician is trained in advanced troubleshooting and will take action to remedy the outage. As-found photos will be taken to document the site before any work is done, and As-Built photos will be taken as the technician leaves the site. If replacement of the network device is required, the technician will use a new device from Customer stock. Local Mueller Systems technician will be responsible to return any defective product to Mueller Systems for failure and warranty analysis in a timely manner. A summary of all work will be returned to Customer and logged in the case that tracks the issue through to completion for archival purposes.

Infrastructure Troubleshooting Steps: Licensed Environment

Mueller Systems will respond to all service requests within two (2) hours. If local troubleshooting is required, Mueller Systems will be onsite within eight (8) business hours. Mueller Systems will attempt to resolve all service requests within 3 to 5 business days, and if such service request cannot be so resolved, Mueller Systems will provide Customer with daily updates and action plans until the service request is resolved. Work above 50 feet (XR-R applications) may take longer than 5 business days.

Step 1: Notification of Outage

Customer's SPOC will notify Mueller Systems NOC of the potential outage condition. A ticket will be opened with the Mueller Systems NOC from tracking the incident and the ticket number will be provided to the Customer SPOC for tracking.

In the event Customer would need to alert Mueller Systems of a potential outage (i.e. physical damage, vandalism, etc.); reporting will be done through the Mueller Systems NOC. Mueller Systems will open a ticket for the incident, and future communications on the issue will be through the Customer SPOC.

Step 2: Remote Troubleshooting

In reaction to suspected outage, Customer will perform corrective actions to attempt to recover the outage. This will include:

- (1) Troubleshooting and restoration attempts on the cellular backhaul connection (which will including working directly with third party provides such as AT&T)
- (2) Remote Reboot (if the Mi.Hub is responsive on the cellular backhaul)
- (3) Additional troubleshooting steps as required attempting to determine root cause of the outage.

In the event remote troubleshooting does not remedy the outage, Mueller Systems will arrive onsite and coordinate with NOC personal to troubleshoot. If there is no power present at the electrical connection to the Hub, Mueller Systems refer the outage back to the customer so that power can be restored by the local electrical provider.

The issue may also be with the cellular provider or with other aspects on the backhaul connection. If local troubleshooting reveals no outright issues with the Mi.Hub device, and escalation is required by Mueller Systems to its third party vendors, a second visit may be required before additional technicians are dispatched.

All actions taken will be logged in the Mueller Systems troubleshooting ticket and included in a final incident report.

Step 3: Technician Dispatch for On-Site Troubleshooting or Replacement

Mueller Systems, or its trained subcontractor, will be dispatched to the site for any outage that cannot be remedied through previous Steps troubleshooting. Mueller Systems will coordinate this time with the Customer SPOC to occur during normal

business hours Monday through Friday 8am to 5pm. The onsite technician is trained in advanced troubleshooting and will take action to remedy the outage. As-found photos will be taken to document the site before any work is done, and As-Built photos will be taken as the technician leaves the site. If replacement of the network device is required, the technician will use a new device from Customer stock. Local Mueller Systems technician will be responsible to return any defective product to Mueller Systems for failure and warranty analysis in a timely manner. A summary of all work will be returned to Customer and logged in the case that tracks the issue through to completion for archival purposes.

Warranties and Fees

In consideration of the fee, this plan covers all labor for the servicing of network assets and managing infrastructure RMAs and stock during the year such fee was received by Mueller Systems.

Mueller Systems will manage RMAs, Customer stock and maintain inventory levels. Mueller Systems, or its subcontractors, will dispose of non-warranty RMA products on behalf of Customer if desired.

This plan does not alter, change or effect the standard warranty related to the equipment and software purchased by Customer.

Standard Mueller Systems products needed for inventory for this plan (collectors, repeaters, etc.) will be ordered and billed at quoted prices.

Materials and specialized services are not covered by this plan, but Mueller Systems will make commercially reasonable efforts to acquire all specialized materials and services required under this plan. Such materials and services will be detailed and itemized in a trip summary, and billed to Customer on a cost plus twenty percent rate. Specifically these additional items are:

- Any materials used to service assets (e.g. coax connectors, electrical connectors, LMR cable, antennas, etc.).
- Any other specialized materials or services that may be required to repair assets.

In the event any specialized materials and services cannot be obtained by Mueller Systems for reasons and circumstances outside of its reasonable control, Mueller Systems and Customer will work together to develop a plan to address such issue.

RF Modules

Overview

This plan assumes all covered asset locations have been installed, passed acceptance testing, and have been accepted by Customer and will be maintained exclusively by Mueller Systems or assigned subcontractors,. Mueller Systems will perform onsite monitoring and maintenance of installed Mi.Node equipment (excluding meter bodies and registers) in order to meet monthly reporting percentage goals outlined in the EAP below. Mueller Systems will investigate and repair non-operating installed equipment and process RMAs. Mueller Systems will produce a monthly report of reporting percentage using the equation below.

Summary of the service level commitment provided by Mueller Systems is as follows:

- 98.5% reporting of all Mi.Node devices covered
- Any ledger than falls below 98.5% will be mitigated prior to the next billing cycle for that ledger
- Acknowledgement and response of all service requests within 2 hours
- Daily/Weekly local troubleshooting as required to maintain read rate
- Problem resolution of most individual requests within 3 to 5 business days
- Management of spare equipment to targeted stock levels

Assumptions

Single Point of Contact (SPOC): Customer will provide Mueller Systems with a single point of contact for notification and communications relating to the assets covered by this plan. This SPOC will be responsible for the coordination of activities and responsibilities assigned to customer.

Access: Customer will arrange for timely access to all assets covered under this plan. Customer will coordinate access to any assets installed on third party sites, and ensure access to locked gates, buildings, or any area that a network asset is installed which may require special considerations to service. If requested by Mueller Systems, customer will make attempts to arrange for safe access to assets through local law enforcement, etc.

Covered Assets: Covered assets are defined as installed Mi.Nodes. This agreement is valid for a total of up to 65,000 installed Mi.Node devices. The exact quantity and locations of devices to be mutually agreed upon by both parties as a first step in the execution of this plan. This does not cover installed meters or registers.

Access to MiNet system: Customer will provide to Mueller Systems access to the MiNet system 24/7 for monitoring. A list of active accounts on a regular basis will be provided to ensure that monitoring and maintenance is conducted on the correct accounts. Any geographic area with no approved infrastructure locations will not be part of the read percentage.

Stock: Mueller Systems will maintain 5% stock levels on all required parts for maintenance of Mi.Node devices: 3 wire (non-RDM) and 5 wire (RDM), TTLs. Mueller Systems will maintain stock in a secure location in or around the city of Jackson, MS. Inventory will be available for audit upon request by Customer.

Mueller Systems will produce one report per ledger per month. Mueller Systems will investigate and repair Mi.Nodes on a regular basis to ensure each ledger is maintained at 98.5%. If any ledger falls below 98.5%, Mueller Systems will commence mitigation efforts within 2 business days. Any ledger that is below 98.5% will be restored to 98.5% prior to the next billing cycle.

Endpoint Acceptance Plan (EAP)

The objective of the EAP is to verify that the AMI System will operate and meet or exceed the Criteria herein. For all tests below, Mueller Systems will calculate the applicable performance requirements using the existing software features within the AMI System. Unless stated otherwise below, any disputes regarding the performance of the AMI System shall be settled using meter read data from Mi.Host's database.

1.1 Test Procedure

- a. Mueller Systems notifies customer of readiness to commence testing
- b. Mueller Systems and customer mutually agree upon start date and test duration
- c. Testing will be conducted
- d. Mueller Systems will provide written test results within 5 days of the conclusion of the test
- e. If test results fall within performance criteria set forth below, Mueller Systems will provide written notice of successful completion
- f. If test results fall outside of the performance criteria set forth below, Mueller Systems will attempt to determine root cause of non-reporting Mi.Nodes utilizing Mi.Host network tools
- g. When sufficient remediation has been completed, proceed to step 1.a
- h. Accounts that are unable to be serviced and repaired for 2 months continuously through no fault of Mueller Systems, will be removed from MiNet system.

1.2 Test Performance Criteria

a. Collection of Billing Data

Performance Criteria is 98.5% reads during the applicable Billing Window^[1]

Performance Criteria = $100 \times ((\text{Successful Communications}) / (\text{Expected Communications}))$.

- Successful Communications is defined as a billing read available in Mi.Host.
- Expected Communications is defined as a billing read from each active account in Mi.Host.

The denominator, "Expected Communications", in the formula above will be modified to adjust for the following conditions:

- 1) Damaged meter or Mi.Node for example: meters with tamper, theft or other human induced failures that render the meter or Mi.Node Module incapable of providing a read and Mueller Systems is unable to repair due to reasons beyond Mueller Systems' control.
- 2) Other Installation Defect—the unit is otherwise installed improperly so that it does not communicate with the network infrastructure and Mueller Systems is unable to repair due to reasons beyond Mueller Systems' control.
- 3) Meter or Mi.Node has been identified for Customer to remediate
- 4) Mi.Node is serviced by network infrastructure that has been subjected to a power failure or has been inoperative for greater than eight (8) total hours within the last 3 days
- 5) Illegal or unauthorized jamming of the radio spectrum is preventing or interfering with radio communications
- 6) Data Base errors — the Mi.Node is removed from the field but not removed from the Mi.Host database.
- 7) Mi.Node is dependent on Mi.Node that has been identified for Customer to remediate
- 8) A Mi.Node or the network equipment that serves a Mi.Node has been affected by a Force Majeure event. Cases 1, 2, 3 and 8 a synopsis with pictures will be provided to the customer within 2 business days after investigation.

2. The EAP test procedure can be applied to the entire population or may be applied to a subset of meters based on network layout, geographic region, or meter reading routes as mutually agreed upon by Mueller Systems and the Customer.

^[1] Billing Window means the span in days, no shorter than 3 days, during which a valid meter read must be obtained to properly bill a customer.

Warranties and Fees

In consideration of the fee, this plan covers all labor for the servicing of Mi.Node equipment and managing Mi.Node RMAs and stock during the period such payment is received by Mueller Systems.

Mueller Systems will manage RMAs, Customer stock and maintain inventory levels. Mueller Systems, or its subcontractors, will dispose of non-warranty RMA products on behalf of Customer if desired.

Standard Mueller Systems products needed for inventory for this plan (Mi.Nodes, TTLs, etc.) will be ordered and billed at quoted prices.

This plan does not alter, change or effect the standard warranty related to the equipment and software purchased by Customer.

Materials and specialized services are not covered by this plan, but Mueller Systems will make commercially reasonable efforts to acquire all specialized materials and services required under this plan. Such materials and services will be detailed and itemized in a trip summary, and billed to Customer on a cost plus twenty percent rate.

In the event any specialized materials and services cannot be obtained by Mueller Systems for reasons and circumstances outside of its reasonable control, Mueller Systems and Customer will work together to develop a plan to address such issue.